

DOCUMENT RESUME

ED 127 630

CS 202 897

TITLE A Community Television Production Experience.
INSTITUTION Colorado State Univ., Ft. Collins. Dept. of Technical Journalism.; Denver Community Video Center, Colo.
PUB DATE 75
NOTE 65p.
EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.
DESCRIPTORS Community Education; Community Involvement; *Community Programs; Editing; Instructional Materials; Manuals; Post Secondary Education; *Production Techniques; *Television; *Video Tape Recordings; Workshops

ABSTRACT

The major goal of the Basic Video Production Workshop program of the Denver Community Video Center was to communicate basic production skills, through the use of extensive hands-on experience, to people with little or no training in the use of visual media. The ideas and exercises presented in this manual focus on the design and completion of video productions to serve community needs through cooperative group effort. Basics of single-camera technique (using the Porta-Pak videotape system), audio, lighting, interview techniques, and postproduction editing are explored. Discussions of issues in the use of the medium include the following topics: the power of video, how TV can be used to benefit the community, video ethics, and communication of the learning and production experience to others. A video glossary, bibliography of useful resources, equipment list, storyboard/script sheet, tape cataloging sheet, and master editing sheet are provided in appendixes. (KS)

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A Community Television

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***Prepared by the Workshop
Task Force of the Denver
Community Video Center
in cooperation with the
Department of Technical
Journalism of Colorado
State University***

Production Experience

table of contents:


	PAGE
Introduction	iii
HOW TO USE THIS MANUAL	v
1. HOW CAN MEDIA SERVE YOU?	1
what are your needs?	1
choosing the medium--do you really need video?	1
experiencing your video image	3
designing your video statement	3
2. THE PORTA-PAK	5
the video tape recorder (vtr)	6
video tape	8
threading the vtr	8
operating the vtr	9
vtr maintenance	11
the camera	12
the lens	13
camera maintenance	15
trouble shooting	15
3. AUDIO	16
4. MICROPHONES	18
5. LIGHTING	20
6. INTERVIEWING	22
types of interviewees--some helpful hints	23
7. PRODUCTION LOGISTICS	24
8. VIDEO ETHICS	26
9. EDITING	27
in camera editing	28
electronic editing	28
cataloging your tape	29
the rough cut	31
making the edit	31
different kinds of edit	33
audio edits	34
10. PRODUCTION DESIGN	35
11. SCRIPT REALIZATION--THE TAPING SESSION	37
12. SCRIPT REALIZATION--THE EDITING SESSION	38
13. EVALUATION	39
14. A FINAL WORD ON COMMUNITY TV PRODUCTIONS	40
15. DISTRIBUTION	41
16. SKILL SHARING	43

	PAGE
APPENDIX A--VIDEO GLOSSARY	46
APPENDIX B--BIBLIOGRAPHY	51
APPENDIX C--EQUIPMENT CHECK-OUT LIST	54
APPENDIX D--ACCESSORY EQUIPMENT LIST	55
APPENDIX E--STORYBOARD-SCRIPT SHEET	56
APPENDIX F--TAPE CATALOGING SHEET	57
APPENDIX G--MASTER EDITING SHEET	58


Introduction

By going through this Community Television Production Experience, you will gain the skills necessary to make a video statement which will help serve the needs of your community or special interest group. Not only will you carry a production through from start to finish, but you will also learn how to communicate these skills to others. You begin to play a part in the development of community television.


YOU WILL NOT LEARN



how to become a professional TV broadcaster. This experience is designed to give those of us who don't know one end of a camera from the other, but who have something to say and need another tool with which to say it, a chance to learn the necessary skills. We are experimenting with alternative uses of television. If you seek a traditional TV experience, there are numerous courses available elsewhere to meet your needs.



how to be a media Super Star. Our emphasis will be upon a group cooperative effort rather than individual creative statement.



studio production. As community television will only be successful if we get TV to the people, we will be examining the potential of the "city as the studio," using portable video tape recording equipment.

YOU WILL LEARN ABOUT

designing a video production and carrying it to completion through a cooperative group effort.

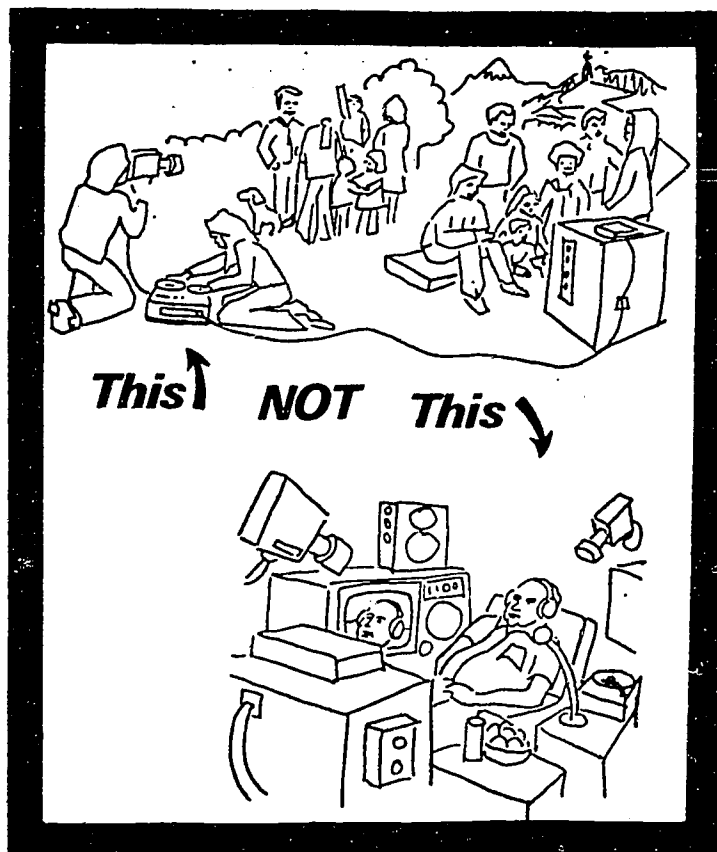
single-camera technique, using the Porta-Pak, the basic production tool of community television.

audio, lighting and interview techniques.

post-production editing.

the power of video, how TV can be used to benefit the community and video ethics--your responsibility when you use it.

communicating what you have experienced to others.



HOW TO USE THIS MANUAL

This manual evolved from materials developed for the Basic Video Production Workshop program of the Denver Community Video Center. The goal of this program is to communicate basic production skills to people who have had little or no training in the use of visual media. It emphasizes "hands-on experience," so a person will gain an insight into the production process and have a chance to become involved in grass-roots community television.

We encourage users of this manual to feel free to use it as a learning tool for your specific needs. In fact, the manual is designed so that information may be added or deleted. For each section, we have included a number of exercises to try or questions to ask regarding the information covered in it. We hope you will find these sections of the manual interesting. Please do not limit yourself to these sections alone, but develop some of your own which relate specifically to your own production needs.

One of the most essential parts of the process of community TV is the continual sharing of production skills with members of the community. This manual is designed to facilitate this.

The ability to provide spontaneous feedback is one of the most beautiful parts of working with video. Your feedback is the evaluation process. Keep notes on your questions, information that has not been described effectively, or any other problems you encountered and how you solved them. You will find this kind of information useful to pass on to others interested in experiencing grass-roots community television.

ABOVE ALL--Use this manual in conjunction with other material and LOTS OF HANDS-ON PRACTICE. We do not envision that this manual will have all the information you will need, nor will reading all the books in the bibliography make you an expert. As you do more and more production, the experience you acquire and the research you do to solve problems will make you a competent video producer. WHEN YOU FEEL CONFIDENT IN YOUR ABILITY, BEGIN TO TRANSFER THESE SKILLS TO OTHERS.

NOTES

v

1. HOW CAN MEDIA SERVE YOU?

what are your needs?

All of us have different reasons for thinking about using media. Some need to communicate important information to a large audience while others are more interested in making a highly personal-artistic statement. Recording the cultural events of the community is important to one person while another wants to use media to facilitate interpersonal communication. Whatever your message is, there is a medium to transmit it.

- ◊ Observe and think over what media can be used for in this community.
- ◊ What do I wish to use it for?

choosing the medium--do you really need video?

What you want to say, to whom you wish to say it and how many times you wish to transmit the message will affect your choice of media. So will the money and equipment available to you. There are many media "avenues." You can use print (posters, leaflets, newsletters, press releases, brochures), audio (public service spots on the radio, cassettes, talk shows, records) or audio-visual presentations (films, slide shows, broadcast, cable or closed-circuit television). Each medium has its own advantages and disadvantages when it comes to communicating your message effectively and efficiently. For example, if you have lengthy and complicated information to share, print might serve your needs best. However, if you wish to give a quick overview of the same topic to a large audience, a slide show or film might be the way to go. Perhaps a combination of an audio-visual presentation and printed information would be the most effective. Remember that the relative budgets vary with each media used. If equipment is available on loan or if you can get a media professional to volunteer his or her time, much of the expense of production can be saved. However, it is still cheaper to mimeograph a leaflet or silk-screen a poster than to process 16 mm film. Though video equipment is expensive, if you can get it loaned to you, the cost of the video tape is minimal--while printing a multi-colored booklet with lots of photographs can be prohibitively expensive.

So evaluate your resources and pick the medium which best serves your needs. Budget carefully, be modest in your expectation, be prudent in your message and, above all, BE ORGANIZED.

- ◊ Think out carefully the advantages and disadvantages of the various media.
- ◊ Which is the best for your needs. Why?

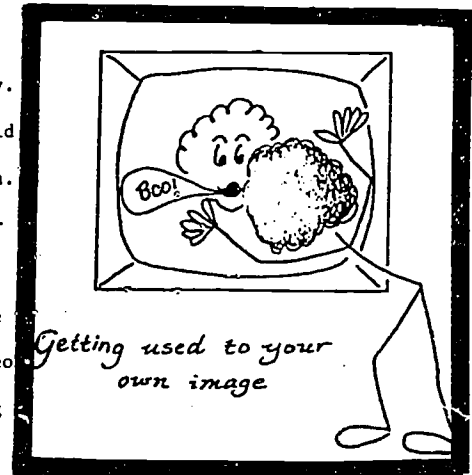
page 1

A COMPARISON OF THE VARIOUS TYPES OF MEDIA

	ADVANTAGES	DISADVANTAGES
PRINT	<p>Cheap production materials</p> <p>Easy production process</p> <p>Can be distributed individually</p> <p>Can be produced quickly</p> <p>Can deal in depth with topics in a short space</p> <p>Can use static visual aids such as graphics and photographs</p>	<p>Bulky to transport</p> <p>May lack visual impact</p> <p>Can't show motion or sound</p> <p>Often discarded before thorough reading</p> <p>Distribution is often more tedious or expensive than production</p>
AUDIO	<p>Inexpensive to produce</p> <p>Compact to transport and cheap to duplicate</p> <p>Comparitively easy access to broadcast media (radio)</p> <p>Can be presented to a group or used individually</p>	<p>Must be presented in very quiet environment</p> <p>No visual impact</p> <p>Though radio has a large audience, it is fragmented and Public Service Announcements are often aired at non-peak times</p>
FILM	<p>Can be shown to a large audience</p> <p>Choice of black and white or color</p> <p>Playback equipment(projectors) very available</p> <p>Production equipment is sophisticated and reliable</p>	<p>Expensive to produce and duplicate</p> <p>Long production process</p> <p>One-way medium</p> <p>Hard to revise</p> <p>Production is easily dated</p>
TAPE-SLIDE	<p>Inexpensive to produce and duplicate</p> <p>Can be shown to large audience</p> <p>Very easily revised and projection equipment is readily available</p>	<p>Complicated presentations require expensive, bulky equipment</p> <p>Often has "amature" connotations</p> <p>Tends to be "talky"</p>
BROADCAST TV	<p>Choice of black and white or color</p> <p>High quality</p> <p>Large audience</p>	<p>Production equipment is expensive and bulky</p> <p>Usually not accessible to the community because of long training period necessary, union regulations, etc.</p>
HELICAL SCAN VIDEO TAPE	<p>Easy-to-learn, comparatively inexpensive production process</p> <p>Tape is reusable and available for instant playback</p> <p>Equipment is portable and record sound and picture in sync</p>	<p>Only black and white available in portable units at moderate prices--color, though recently introduced, is about three times more expensive than black and white</p> <p>Playback limited to small audiences except with distribution systems</p> <p>Production equipment is not very reliable</p> <p>Can't be broadcast without time-base corrector and transferring to two-inch video tape or shooting off station monitor with loss of resolution</p>

experiencing your video image

So you've decided to use video--the electronic mirror with a memory. Before you go out making tapes on everything in sight, perhaps you should become acquainted with your image as you appear through the video camera. Seeing your video image for the first time can be an exciting and/or uncomfortable experience. It is perhaps the most "objective" view of yourself that you will ever see. Some of you will warm up to your image quickly--while others will not enjoy it at all. Little wonder that video is a most powerful tool when used in psychoanalysis, marriage counseling and other therapeutic endeavors.



- Set up some video equipment and tape each other, hopefully members of your production team. Play back the tape.
- Discuss how you feel about your own image. Do you feel any different when you are behind the camera rather than in front of it? Where do you feel exposed? Safer?
- Do some role playing. How could this be used to sensitize people to how they interact?

(Do not attempt this exercise until you have covered the mechanical aspects and information on the equipment itself in Section 2.)

CAUTION: Be sensitive to the dynamic force you have just experienced when you make a tape and play it back to someone. Video tape is a powerful tool and can be abused. BE CAREFUL!!

designing your video statement

What do you want to say?

Once you have decided that video tape is the medium you wish to use to convey your message, try to write down as concisely as possible the idea, theme or statement you wish to communicate. For example, you might want to make a tape on (1) the "pain" of youth, (2) the rehabilitation procedure of a local drug-alcohol program or (3) a Hispano cultural program which will be presented at a community center next Tuesday afternoon. This statement can be lengthy or brief, but it should be as specific and detailed as possible. Some production ideas are hard to put down on paper for a variety of reasons. Do the best you can. Don't overextend yourself. Be mindful of the availability of budget, equipment, time and personnel.

page 3

In planning your production, determine whether you are adequately informed about the subject matter. Are you, in fact, the appropriate person to make the tape? Don't be afraid to ask for help or direction from the group with whom you will be working. Better yet, show them how to use the equipment and involve them in the entire production process of planning, shooting, editing and distribution.

Whom do you wish to reach? The Target Audience.

Your target audience is that group of people to whom you are directing your video statement. It can be general or specific. Is the target young or old? The public at large or only people between 18 and 25? Do you have a number of audiences in mind? Will more than one version of the tape be necessary, e.g., recording the commentary in both English and Spanish?

Each audience will respond differently to your visual and audio images. The same images may cause a variety of responses. Should a tape about a senior citizens' group use hard rock music or would another choice be more appropriate? Will a city agency react positively to visual images that have proved successful with grass-roots community groups?

How do you present your video statement?

This is where you begin to "rough out" your production. You decide about the specific tone, content, pace and style to be used. Do you want to use a documentary style or should it be tightly scripted and shot in the studio? What kinds of still pictures or graphics--if any--will be needed? Should you use professionally recorded music or will a local musician suffice? What about newsreel footage, actors, props, shooting locations, etc.?

The major point here is that you should think out your production in detail. You will find that the time initially spent in organizing all the components of your production will pay off later. When you go out to make your tape, you will have all the things you need for your production. The location will have been scouted out, and tasks and responsibilities allocated.

This will leave room for you to make changes in the production if necessary. You will be much more relaxed and creative if you don't have to wonder if someone remembered to charge the batteries the day before.

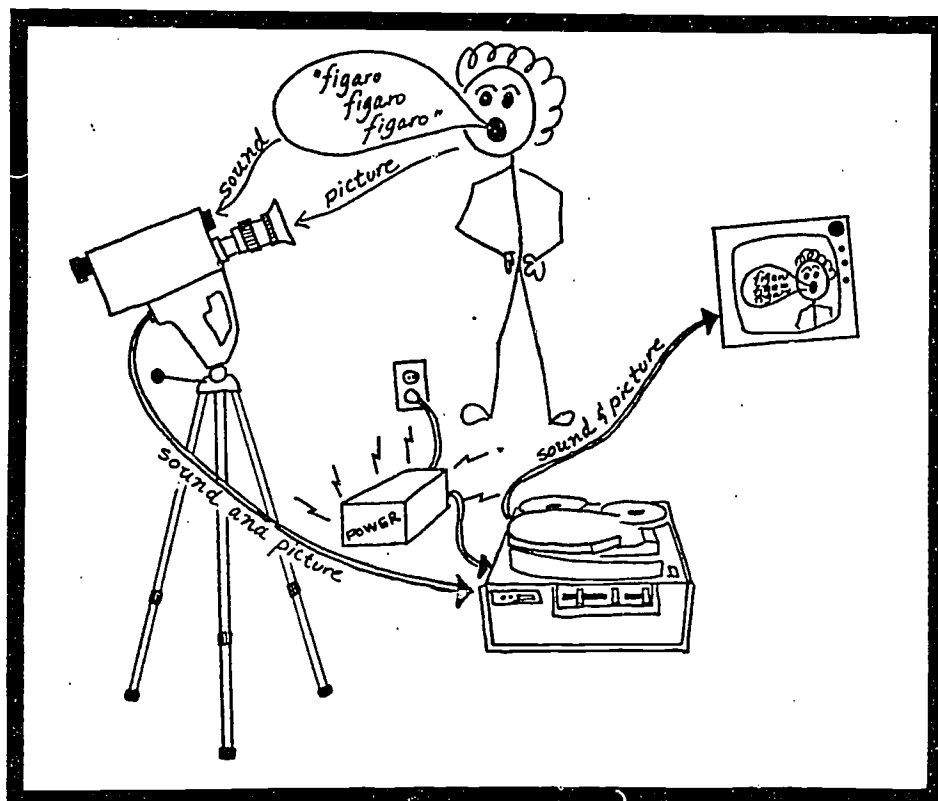
N O T E S

2. THE PORTA-PAK

The Porta-Pak is the basic video production tool of community television. It is a TV camera-video recorder (VTR) ensemble which weighs about 25 pounds and can be operated off house current or a battery. It will record a half-hour of "synced" sound and picture and instantly "process" the information. The tape can then be played back through the viewfinder on the camera and the sound can be heard through an earphone. The Porta-Pak is relatively inexpensive (\$1,750) compared to one- or two-inch video tape recording equipment and is easy to learn how to use and operate.

Its portability enables you to make a tape almost anywhere. With the addition of an RF (radio frequency) adaptor, a tape can be played back in a person's living room through their home TV set.

Though there are a number of manufacturers of Porta-Paks, in this manual we will refer to the Sony Video Rover II. It is most likely the type of Porta-Pak you will come in contact with. Be sure to read the operating manual which comes with the specific piece of equipment you are using.



page 5

the video tape recorder (vtr)

The Porta-Pak uses an EIAJ-Type I format VTR. This means that video tape, one-half inch wide, traveling at $7\frac{1}{2}$ inches per second(ips), meets other specifications set down by the Electronics Industries Association of Japan(EIAJ). Information about the picture (video) is recorded in a helical or slant track. This is accomplished by the rotating video heads (more about this later) and the difference in height between the supply and take-up reels. Audio and sync control (the electronic "glue" which holds the TV picture together) track information and are also recorded on the tape. All tapes made on EIAJ-Type I VTRs should be interchangeable. However, often they do not playback as well on machines on which they were not originally recorded.



Power

AC Current

When possible, run the Porta-Pak off 110 to 117 volts AC current. It will give you a more stable picture and will save your batteries. Plug the power cord from the rectangular AC adaptor into a wall receptical. This is a three-prong plug. Use a two- to three-prong plug adaptor if necessary. MAKE SURE THE POWER SWITCH ON AC ADAPTOR IS OFF. You may blow out a variety of electronic components if this is not done. Always turn the power off before connecting or disconnecting various pieces of electronic equipment. Now plug the other wire (with the four-pin connector) which is attached to the AC adaptor into the jack on the VTR which is labeled INTERNAL POWER IN. Connect the camera cable to the 10-pin jack on the side of the VTR labeled CAMERA. Turn the power switch ON. A red indicator light on the AC adaptor should light up. If not, check your connections. Is there actually power to the wall receptical? A lamp or other electrical appliance makes a convenient testing device. Is the fuse in the AC adaptor blown? Replace it if necessary.

Batteries

The Porta-Pak will operate on a variety of 12-volt DC sources. The Gel-Cell is the internally connected battery supplied with the Porta-Pak and will last about 20 minutes. The Nickel-Cadmium battery pack will give about two hours of power and is connected to EXTERNAL POWER IN.

There is also an adaptor available to run the Porta-Pak off a 12-volt automobile or motorcycle battery. A motion picture battery belt can also be used. Be sure to use the adaptor cord so that surges in current won't blow out any components.

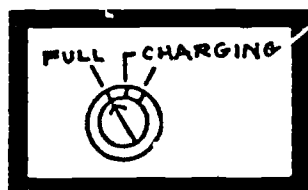
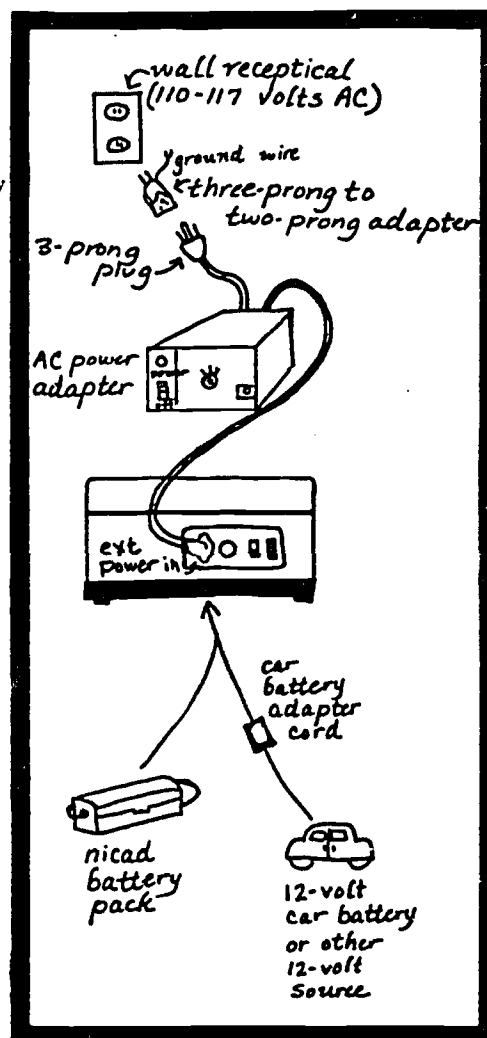
Charging the Batteries

Gel-Cells. The AC adaptor is also a battery charger. Plug it into the wall receptical and EXTERNAL POWER IN and turn it on. It will charge your internal battery. There is also a plug on the adaptor so that you can plug in another Gel-Cell. Charging time is six to eight hours. The adaptor has an automatic shut-off so you can't over-charge the Gel-Cell.

Nickel-Cadmium Batteries. NiCads are weird. They have a memory. Try to use them an hour-and-a-half before re-charging. If you only use them for a short time and then recharge them, they tend not to accept a full charge. DO NOT charge them for more than 16 hours as they WILL EXPLODE!! There is no automatic shut-off.

Charging Meters. There is a meter on the adaptor which will show whether you are charging or the battery has a full charge. To check the VTR's internal battery, move the RECORD lever to the left. There is a meter on the VTR. The needle will be in the red if the battery is low and in the white if it is fully charged.

Practice plugging in the various power sources and checking the state of charge of these sources.



video tape

Video tape is composed of a plastic base with a coating of ferro-magnetic or chromium-dioxide particles. When run through a VTR, it will store sound, picture and sync control information. Video tape is like audio tape in that it can be recorded over and over again. It can be stored for a long time and will give good service when cared for properly. Video tape comes in a variety of lengths, from 10-minute to one-hour reels. The Porta-Pak ONLY HAS ROOM FOR A HALF-HOUR, FIVE-INCH REEL. There are many manufacturers of video tape. Test a variety of tapes and select the best kind for you. This may be determined by the price. You can save money by buying in bulk.

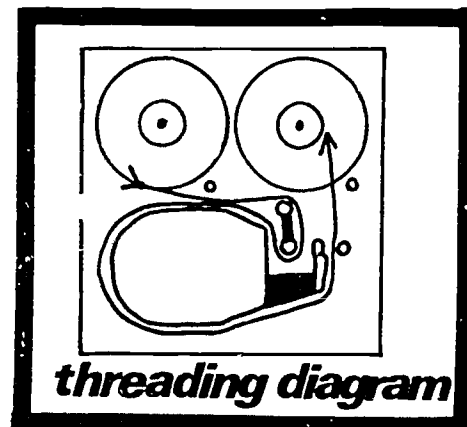
- ➡ a. DO NOT HANDLE VIDEO TAPE WITH GREASY, DIRTY HANDS.
DO NOT DRAG IT ON THE GROUND.
- ➡ b. DO NOT EXPOSE IT TO CIGARETTE SMOKE.
- ➡ c. IMMEDIATELY CUT OFF ANY DAMAGED TAPE. THIS MAY MEAN CUTTING A REEL OF TAPE IN HALF. CARRY A SPARE REEL WITH YOU TO STORE THE "SHORT END" ON.
- ➡ d. STORE THE VIDEO TAPE IN A COOL, DRY PLACE. PLACE THEM ON END. DO NOT STACK REELS.
- ➡ e. WHEN NOT IN USE, PUT THE REEL BACK IN ITS PLASTIC COVER, VINYL BOX AND CARDBOARD CONTAINER.
- ➡ f. OLD VIDEO TAPE WILL EXHIBIT DROPOUT, example, WHITE STREAKS OR SPOTS ON PLAYBACK. DO NOT THROW THE TAPE OUT, BUT USE IT FOR PRACTICE OR WORKSHOPS.
- ➡ g. ALWAYS LABEL YOUR TAPES SO THAT THEY WON'T GET ACCIDENTALLY ERASED.
- ➡ h. DO NOT USE COMPUTER TAPE--EVER!!!!

threading the vtr

MANY RECORDING PROBLEMS COME FROM MISTHREADING. DO THIS CAREFULLY AND RECHECK YOUR WORK.

- a. DO NOT ATTEMPT TO THREAD THE MACHINE WHEN IT IS RUNNING. MAKE SURE THAT IT IS IN THE "STOP" MODE AND THE HEADS HAVE CEASED SPINNING.
- b. Set the VTR down flat on a stable surface.

- c. Properly position a reel of video tape on the supply spindle.
- d. Gently reel off--do not pull off--about 2½ feet of tape.
- e. Thread the VTR, following the diagram on the inside cover.
- f. Check your work. Does the tape go around the various rollers correctly? Is it twisted? Take up any slack by gently turning the reels by hand.



- g. Put the function lever into FORWARD. Is the tape moving freely? Run off about 30 seconds onto the take-up reel. This is protection for you. If you have to cut off any mangled ends, you can do it without cutting into the beginning of your production.
- h. The function levels must be operated positively. Move from one mode to another firmly and quickly. Do not lag between modes or you will most surely get a tape backlash. The function levers are made out of plastic and are vulnerable. Do not abuse them.
- i. If you get a tape snarl or backlash and the tape becomes wound around the capstan roller or worse, DO NOT PANIC.
 - (1) STOP THE VTR IMMEDIATELY BY PUTTING THE FUNCTION LEVER IN THE "STOP" MODE.
 - (2) GENTLY begin to extricate the tape from the machine. Use razor blade if necessary to cut the tape. Do not use any metal tools near the VIDEO HEAD DRUM.



Experiment with threading the VTR, making sure you avoid simple mistakes.

operating the vtr

When the VTR is threaded, close the lid. This is protection from dust and foreign objects being thrust into the guts of the machine. Zip up the vinyl cover, or take it off completely, so someone doesn't pick it up by the strap and topple the VTR to the floor. This will incur a large repair bill and is not recommended operating procedure.

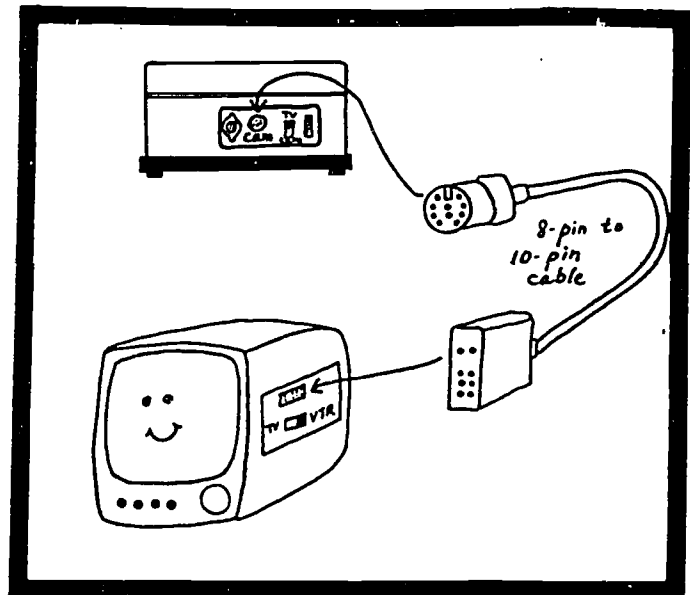
a. To record WITH THE CAMERA

- (1) Connect the camera cable to the 10-pin jack on the VTR.

- (2) Put the switch on the side of the VTR to CAMERA.
- (3) Pull the RECORD lever to the left and put the other lever in the FORWARD mode. You are now in standby and are ready to record. The standby mode uses electricity and will wear the tape down in one spot. Put the VTR in standby only when you are ready to shoot.
- (4) Let the camera warm up for 20 seconds. A picture will appear. Focus and compose your image. Press the trigger and release it. A red light will go on in the camera. You are now recording. Make sure that the reels on the VTR are turning.

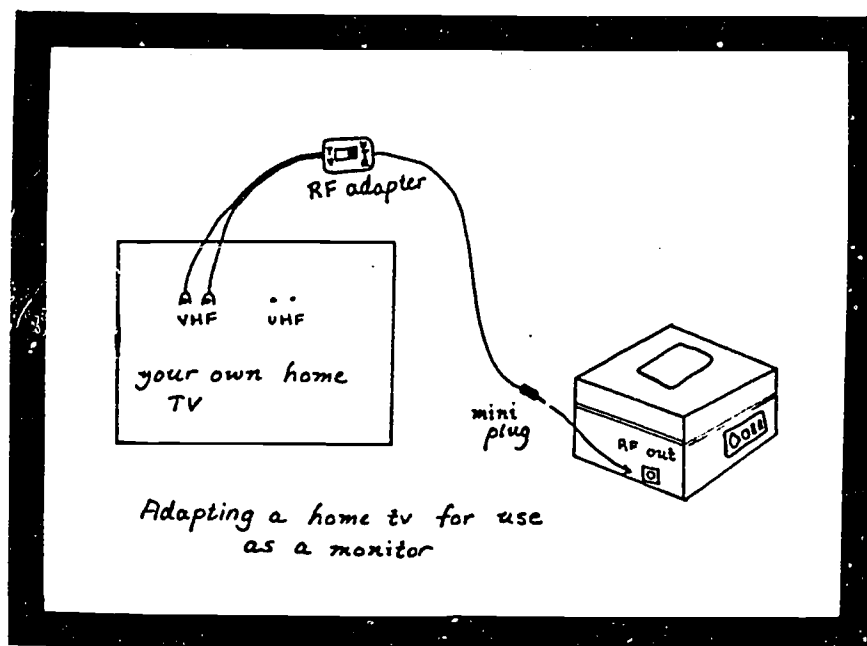
b. To record off a video monitor/receiver

- (1) Connect the monitor to the VTR with the 8-pin to the 10-pin cable.
- (2) Put the switch on the VTR to "TV."
- (3) Put the switch on the monitor to "TV."
- (4) Turn on the TV and select the channel.
- (5) Put the VTR into the standby mode.
This will begin recording the sound and picture received by the monitor "off the air."



c. To playback

- (1) Through a camera. Rewind the tape and put the function lever into the FORWARD mode. View the picture through the camera viewfinder. To hear the audio, connect an earphone to the mini-jack labeled EARPHONE on the side of the VTR.
- (2) Through a monitor. Connect the 8- to 10-pin cable between the VTR and the monitor. Put the switch on the monitor to the VTR and the VTR in the FORWARD mode.
- (3) Through a home TV set. Connect the RF unit to the VTR with the mini-plug and the antenna wire to the VHF antenna terminal posts of the TV. Turn the channel selector to the appropriate channel, e.g., channel 3, and put the VTR in the FORWARD position. Fine tuning of the channel selector may be necessary.
- (4) Playback hints.
--When playing back a tape recorded on another machine, the TRACKING control on the side of the VTR may need adjustment. Center the red line on the dial if not in use.



--A still picture can be obtained on playback by pulling the STILL control lever in the direction of the arrow. Do not leave the machine in this position for very long as it will wear down the tape in one spot.



Try your own hand on the VTR with recording and playback techniques.

vtr maintenance

Because the Porta-Pak is a highly sophisticated piece of electronic equipment, it is somewhat fragile. Be careful with it. Do not throw it around. Keep it out of situations of extreme temperature. Do not leave it in a very hot place such as the trunk of your car. Put it in its padded, fiber carrying case when it's not in use. If you don't have a case, buy or make one. It's also a handy place to store small accessories.

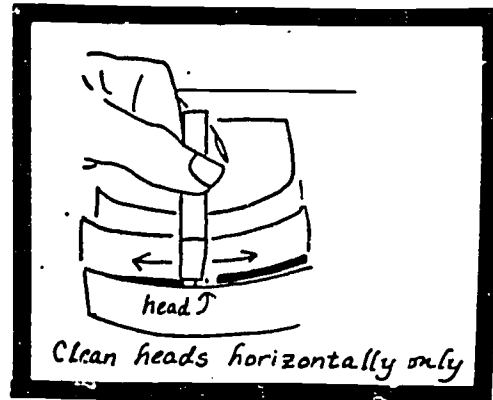
Cleaning the heads. The sound and picture information is converted into electromagnetic impulses. These are then transferred to the video tape through the heads. The heads must be clean to function properly. The rotating video heads accumulate oxide particles which can either give you a poor picture or none at all. To clean the heads, turn the machine off and spray video head cleaner on the heads. Alternatively, you can swab them gently in a horizontal direction with alcohol or head cleaner using the swab provided. Do not use Q-Tips unless absolutely necessary for cleaning video heads.

The stationary audio, erase and control track heads can be cleaned with a Q-Tip dipped in alcohol. Clean the tape path and the general environs. The heads should be cleaned before you go out to shoot and when you

return. Occasionally you may want to clean the rings inside the video head drum. Use a Q-Tip and alcohol for this. Be careful of the brushes. MAKE SURE THE EQUIPMENT IS OFF BEFORE CLEANING THE HEADS. DO NOT PUT METAL OBJECTS NEAR THE HEADS.

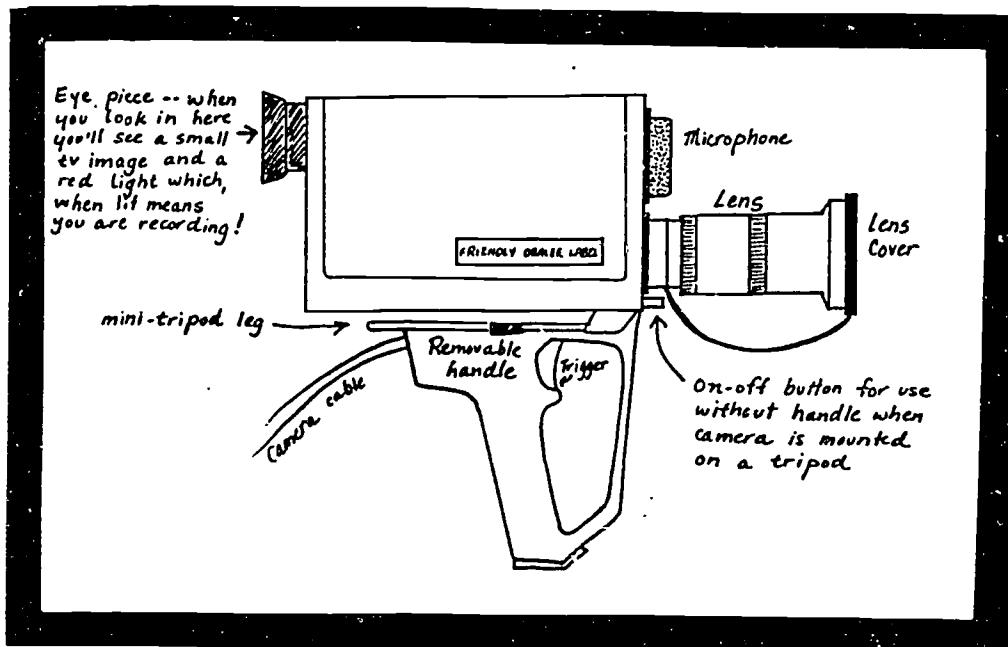


Try your hand at cleaning the heads.



the camera

The Porta-Pak camera is designed so that "what you see is what you get"--almost. The picture you see in the viewfinder will be greyer (or lower in contrast) than when it is played back on the monitor. You have the option of viewing a magnified picture or flipping up the eye piece and looking directly at the viewfinder tube, actually a TV set. THE EYEPiece IS FRAGILE. It can be protected best by keeping it in the "down" position. You may even want to tape it shut. Anyway, they are inexpensive and easy to replace.



Once your camera cable is connected to the VTR and the VTR is in the standby mode, you are ready to record. Pull the trigger on the camera to start the VTR recording. If the camera is mounted on a tripod without the handle, press the button which is found on the front of the camera, below and to the right of the lens. A red light inside the camera will go on when you are recording. Check to see that tape is moving freely in the VTR. If it is not, press the trigger again--FIRMLY. If this doesn't work, make sure that the cover of the VTR is not pressing against the reels and that the tape is not snarled. Pressing and releasing the trigger again stops the recording and puts the VTR back in standby. That's all there is to it, but--

⤴ NEVER, NEVER, NEVER POINT THE CAMERA AT A BRIGHT LIGHT SUCH AS THE SUN, HOUSE LIGHTS, REFLECTIONS, FLAMES, ETC. By doing this you can "burn" the Vidicon tube whether the camera is ON or OFF. The burn will appear as a dark streak or spot which always maintains its position in the viewfinder, no matter where you point the lens. Vidicon tubes are expensive to replace. Always keep the lens cap on and the lens in the "C" or closed position when it is not in use. Defocus the lens and zoom it out to full telephoto.

--Minor "burns" can be sometimes eliminated if you aim your camera to an evenly and brightly lit white card.

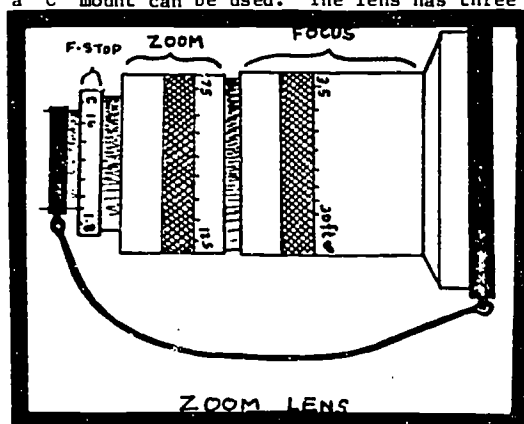
The VTR should be in standby. You are essentially "burning" the whole face of the Vidicon tube and reducing its life.

--Do not point the camera straight down, as particles will fall on the face of the Vidicon, causing it to show black spots.

the lens

The lens focuses the visual image on the face of the Vidicon tube. This image is converted to electrical impulses which travel through the camera cable to the VTR where they are electromagnetically transferred through the video heads to the video tape.

The lens that you will most often use is the 12.5 mm to 75 mm zoom that comes as standard equipment on the Porta-Pak. Other lenses that have a "C" mount can be used. The lens has three adjustments which you must be familiar with.



page 13

The Iris, Aperture or F-Stop Ring. This ring is closest to the camera body and controls the amount of light entering the lens. In low-light conditions, turn it towards the F-2.8 end. In bright light, turn it the opposite way toward F-22. Look through the viewfinder to determine which setting gives you the best picture. It should be a little more contrasty than you think you'll need.

The depth of field or range of apparent sharpness is also controlled by the F-stop ring. The smaller the opening (towards the F-22 end), the more your picture will seem in focus. Using settings closer to F-2.8 will result in a decrease in the depth of field. The background and foreground of your picture will appear out of focus with only a short range where objects appear really sharp.

Automatic Gain Control (AGC). The Porta-Pak camera automatically adjusts for the correct amount of light to provide a "good" picture. But it can be fooled. Because there is not manual override, you must carefully gauge the lighting conditions. Evenly lit, medium contrast situations make the best TV pictures. However, they are not very dramatic. A high contrast scene often gives a sense of unreality, only having extreme lights and darks with no softening grey tones. If you tape someone standing in front of a window with daylight streaming in or if you pan rapidly from a well-lit to a dimly-lit scene or vice versa, the AGC will "hunt." It will either make your subject appear in silhouette or some part of your picture will be over or underexposed until the AGC "settles down."

The Zoom Ring. This ring varies the focal length of the lens from wide angle (12.5 mm) to telephoto (75mm). The wide angle end of the zoom range will allow you to get more of your subject into the picture. It will reduce camera shake, increase the depth of field and distort your subject by expanding its apparent length. The telephoto end will allow you to isolate details in close-up and will let you get close to things which you can't physically approach. A telephoto setting decreases the depth of field and compresses the elements of your picture. It is also susceptible to camera shake. Use a tripod or brace your camera well when the lens is set at full telephoto.

The Focus Ring. Just turn this ring until the picture is sharp. For best results, especially in low light, focus on a person's eyes or on a clearly defined outline.

NOTE: If you zoom in all the way to full telephoto and focus on the furthest object you wish to be in focus, when you zoom back to a wide angle shot everything will be in focus--as long as the camera isn't moved. Remember--it doesn't work the other way around.

The depth of field is greater when the camera is focused at far away objects. It decreases as you focus closer to the camera.

- ➡ Attach the RF adaptor to the VTR and to a monitor or TV set. Begin recording with the camera. You will see the image on the TV.
- ➡ Practice setting the F-stop, focus and zoom.
- ➡ What is meant by depth of field?
- ➡ What do the various settings of the zoom lens do to the subject's appearance?

camera maintenance

An ounce of prevention is worth a pound of cure. Keep the lens capped when not in use. Turn the F-stop to "C." Clean the lens only when there are fingerprints on it. Dust will not show on your picture.

Practice how to clean a lens.

Practice again threading the machine.

Check and charge the batteries.

Clean the heads and the brushes.

Connect up the variety of cables.

Make sure you understand the record and playback systems.

trouble shooting

- a. Is the lens cap off and the F-stop ring off "C"?
- b. Is the switch on the VTR in the correct position?
- c. Is the VTR threaded correctly?
- d. Are the batteries charged? Is the power switch on?
- e. Are the cables connected correctly? Are there any broken cables?
- f. Have you cleaned all the heads?

If all of the above are okay and the Porta-Pak still doesn't work, get someone else to look at it. Only as a last resort send it to a dealer. The trouble is usually with the operator, not the machine.


NOTES

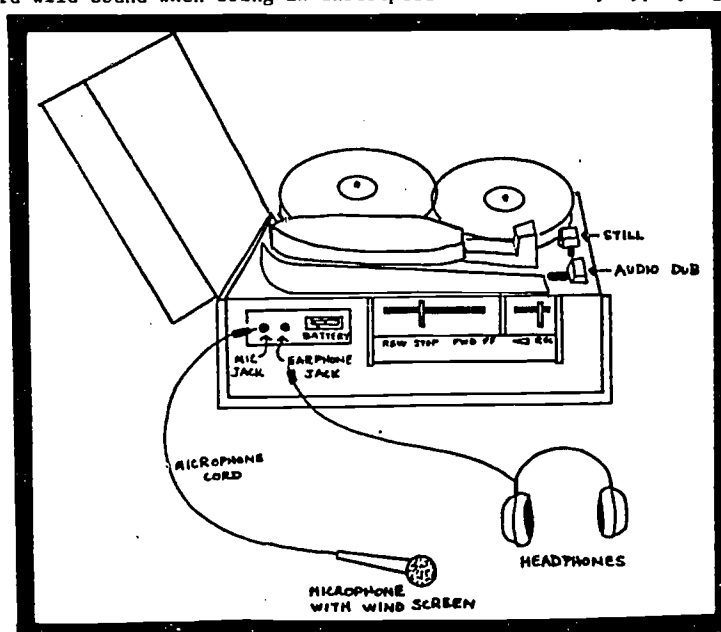
3. AUDIO

Basically, there are two kinds of audio--live and dubbed.

"Live" audio consists of speech, background sounds, etc., which is recorded at the same time the VTR is rolling to record video. The Porta-Pak automatically records this in sync with the picture.

"Dubbed" audio is recorded music, narration, sound effects, etc. This is added to your tape through the machine's AUDIO DUB function during the editing process. To record audio over an already existing picture, plug a microphone or other audio source into the VTR microphone jack, pull the AUDIO DUB lever in the direction of the arrow and put the function lever into the FORWARD mode. Then "speak your piece." One thing to remember is that half-inch video tape carries only one audio track, which means that dubbing sound on the tape will erase any "live" audio that you recorded previously.

 NOTE: When editing your tape, there is often a problem with audio continuity. This may be solved with a little judicious dubbing. "Wild sound" often comes in handy for this. A wild sound track is a separately recorded, continuous (10 to 15-minute) sound track made at the same time or location that your video was shot. A portable reel-to-reel or audio cassette tape recorder works well for this. Portions of the wild sound track can be dubbed in later to provide audio continuity. You should try to record wild sound when doing an unscripted or documentary type program.



page 16

Acoustics (how your audio "sounds") are affected by the size and shape of a room, the type of walls, furnishings and positions of sound sources. Bad acoustics will give your audio a hollow or echoing sound. A very "live" room will sound sharp and hard. Your audio will fade away very quickly in a "dead" room. You will hear an echo when you clap your hands in a "live" room. Improvements can be made by adding curtains, furniture, baffles and people in the room. Rearrange your sound sources and re-position your mikes. Directional microphones may help, too. There isn't much you can do to liven up a "dead" room. Keep in mind that while bad visuals may only be somewhat annoying, lousy audio is intolerable. Pre-test your audio by recording some and playing it back through a monitor if possible.

➤ What are various kinds of sound sources you may encounter in doing a production?

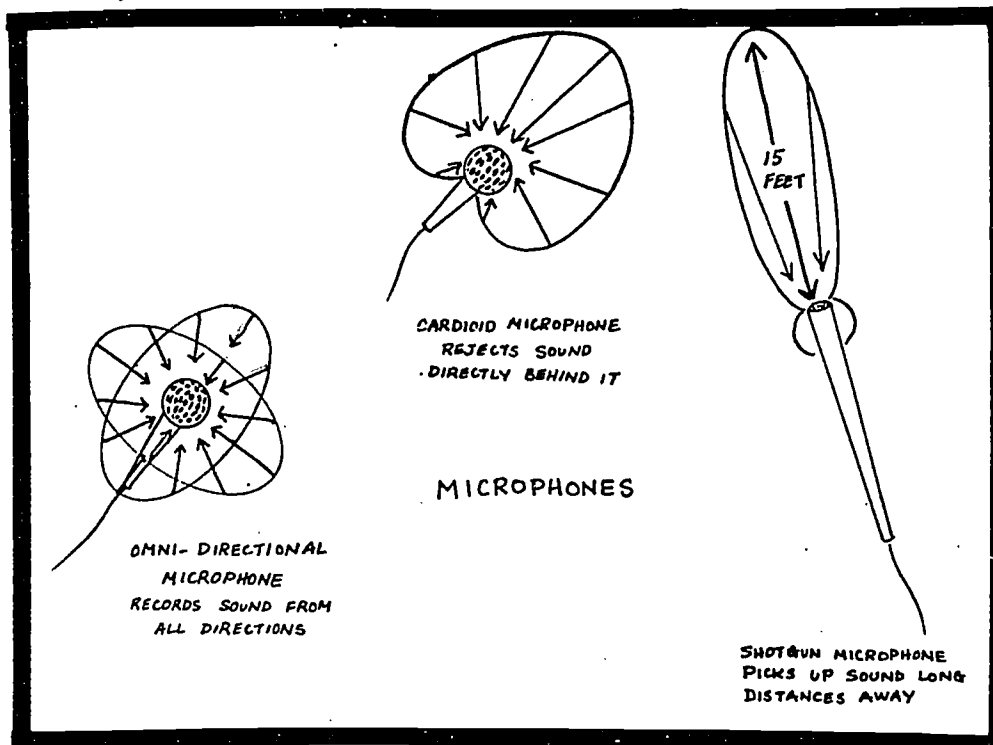
NOTES

4.MICROPHONES

There are three basic kinds of microphones.

Omni-directional. The mike on the Porta-Pak is an omni. It "picks up" sound in a 360-degree circle. Don't use this mike if another is available because it creates embarrassing problems by picking up unwanted background noises and the noises of the camera person. Still--it does come in handy. It is usually effective up to six feet and is good for a small group where there isn't much ambient noise. An omni-directional mike is useful in situations where the sound comes from "all around," such as in a concert hall or in recording a general sound track.

Directional. There are a variety of these. They usually have a cardioid or heart-shaped pick-up pattern. They are much preferred where a hand mike is feasible. Remember that if you use a hand-held mike, you will need another crew member. The F-98 is the one you will probably have and it is sufficient, rugged and cheap. It will tend to reject sounds coming from the direction in which the "back end" on the mike is pointing. This characteristic is very useful in reducing ambient noise from a street or a group of people.



page 18

Ultra-directional. Often called a shotgun mike, it picks up sound in a very tight cardioid or baseball bat pattern. It is quite useful for picking out individual conversations in a crowd or for getting audio when you can't get close to the sound source. Shotgun mikes are standard equipment for documentary productions, but they are also expensive.

Other microphones used include wireless, bi-directional and parabolic mikes. They are specialty mikes and are not usually encountered in day-to-day production.

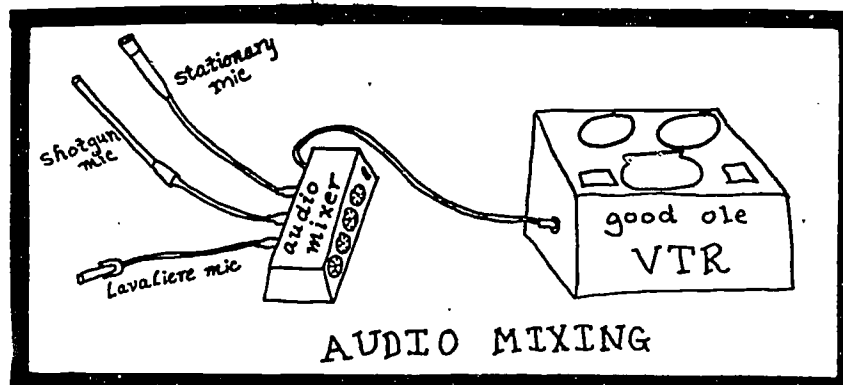
Good microphones have windscreens and/or electric rumble reducers. Lacking these you might cover the mike with a nylon stocking or perhaps a paper cup--but not something that will jiggle around or scratch. Noise produces an ugly rumble on your audio track and it doesn't sound like wind at all. Be aware of traffic, machinery or other miscellaneous background noises. They sometimes sound louder on tape than they do in the field.

If you use a mike stand, place a cushion between it and the table. Do not blow into the mike. Swinging them around by the cord is also frowned upon. Always have extension cords for your mikes. Make sure that they are fully uncoiled and hanging freely when in use. Never play with the cord while taping or let it scrape against something as this will cause rumble. DO NOT BEND OR STEP ON MICROPHONE CORDS. You might want to tape the cords down if they get in the way.

When interviewing, don't hold the mike more than 18 inches (shotgun mikes excepted) or less than two inches from the speaker. Keep mike movement to a minimum. Where there is a lot of ambient noise, move the mike closer. Keep it directly in line with the sound waves.

Some productions necessitate the use of more than one microphone. You will need to use an audio mixer. They are also useful for editing. A variety of different sized mike stands and booms are good to have.

➔ Try different kinds of microphones. What kind would you use to record a rock band? A speaker at a podium? An interview on-the-street?



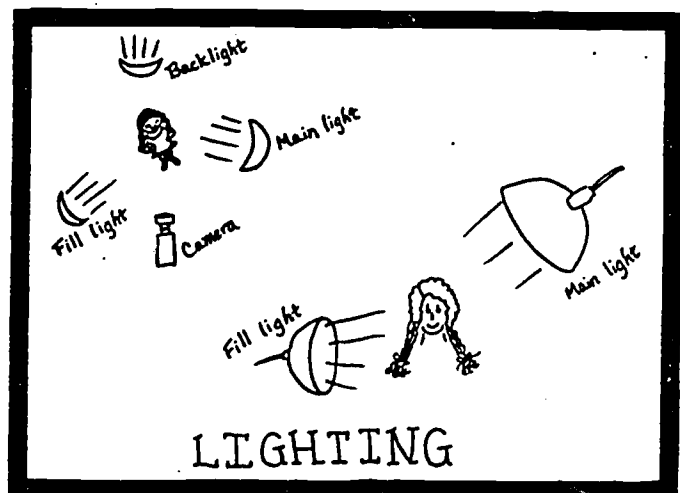
page 19

5. LIGHTING

The Porta-Pak will operate in very low-light conditions. Even if the light seems insufficient at first, you can always "juice up" the picture a bit more when you play the tape back through a monitor. However, low light levels may also give you a weak sync signal--that electronic glue, again. So try to get adequate light when you shoot.

Try to use the available light on location. You won't have to lug around any heavy lights or search the floor boards for electrical recepticals. The people in the room will also appreciate it if you don't have to set up those "hot lights." If turning on all the lights and opening up the curtains doesn't work, the following may be necessary.

- (1) Substitute high-wattage light bulbs for the ones in the fixtures. Don't forget to take them out when you leave.
- (2) If you can't afford a professional lighting kit, pick up some of those clip-on sockets with the aluminum reflectors. They'll accept a 300-watt bulb and throw quite a bit of light--sufficient for a small room, anyway.
- (3) To get some light into a dark corner, try a reflector made out of cardboard painted white. You can also crumple up some aluminum foil and cement its shiny side down to the cardboard. This reflector can be used outside to "throw" some light onto the shadow side of a person's face. It reduces the harshness of high-contrast situations.
- (4) Think about getting a hand-held, battery-operated sun gun. They are quite useful for taping at dusk or night. Though they give a very harsh light, it's better than no picture at all--and it gives that good ole documentary feel to your tape.
- (5) If you have some lighting flexibility, try to set up your lights in a manner similar to the diagram at the right.



REMEMBER! Back-lit situations will tend to silhouette your subject and if your camera "picks up" any bare bulbs, YOU MAY GET A BURNED VIDICON. BE CAREFUL!!

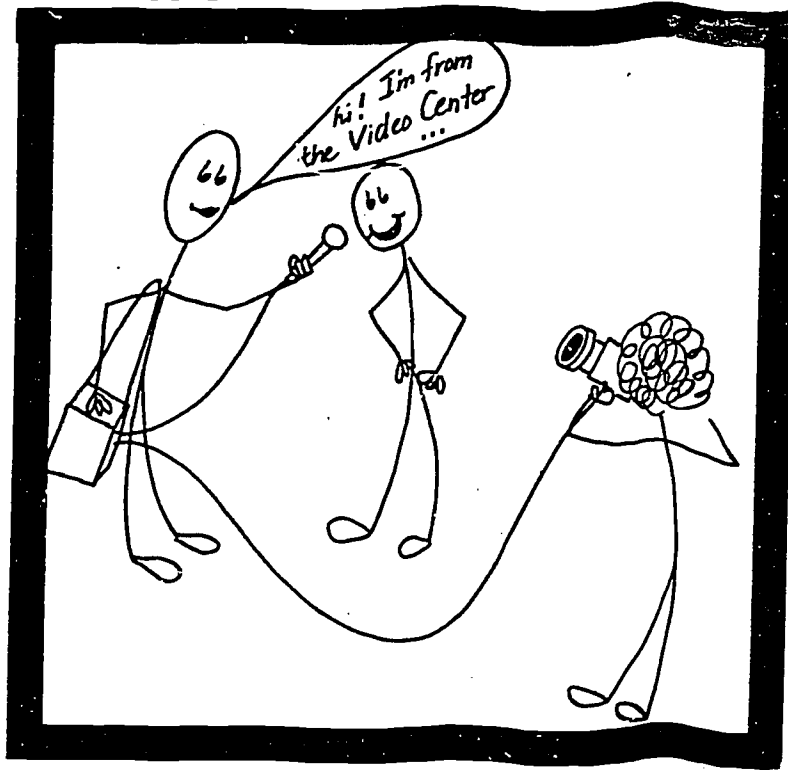
P.S. Take enough extension cords. Don't forget the two- to three-prong adaptors.

- ➡ Play around with different kinds of lighting.
- ➡ Build a reflector.
- ➡ Look for a fuse box, learn how to change a fuse.

NOTES

page 21

6. INTERVIEWING



You will frequently encounter the interview situation when going out with your Porta-Pak. The following may help you.

Preparation. If you have the chance, find out something about the person or group you will be interviewing. What are their concerns or the issues they are fighting for? What are their interests? Know something about the subject matter of the interview. Be specific with your questions. Don't assume that the audience knows anything about the person or the issues.

Identify the person or group. At the very beginning, establish the identity of the person or group. What are their names? Whom are they working for or with? This also helps to break the ice. Don't forget to tell them who you are and what you are going to do with the tape.

The interview environment. Hold the interview in a place in which the person or group will feel comfortable, such as their office or home. Try your best to get them to relax. Be reassuring about what will be done with the tape. Make sure you know. The interviewee will most likely not be a professional speaker; they may be somewhat uptight. Give them the feeling that you're human, too--you're concerned about what they are interested in. If you are not, maybe you shouldn't do the interview. Duplicity or false interest will show through very quickly.

page 22

types of interviewees-some helpful hints

UNRESPONSIVE--Don't ask questions they can answer with a simple yes or no. Rather, ask questions that they can expound upon, i.e., "Tell me about...", or "What do you think about...", rather than "Do you...", or "Are you..." Give them some direction. Not everybody wants to be interviewed. If they won't give you any answers, cut the interview short and thank them for their time.

TALKER--Keep in mind where you want the interview to go. Courteously but firmly get the person on the right track for your tape. Don't be afraid to cut it off, if the person begins talking about things which are irrelevant to the interview. Use your judgement here. Sometimes people need a warm-up time--so don't cut them off immediately if they don't quickly come to the point. You might try to give some kind of time limit like, "We need a short, concise statement about the issue."

FRIENDLY--but with nothing to say. Again, keep the person to the point. Cut off the interview, gently, if they are not providing you with pertinent information.

HOSTILE--Try not to ask obviously threatening or condescending questions. You won't get much information if you deliberately anger, bait, frighten or intimidate the person; or if you make them look like an ass. There are people in this world who are plain hostile to everyone. Do the best you can with them. But there is no need to be abused by them. Some of you may want to confront them with their attitude. Be careful!

Skills. Learn how to handle your microphone so that it doesn't intrude in the interview. Be organized. LISTEN to what they have to say so that you can pick up on particular points which the person is making. By keeping your ears open, you may be able to find some real gems. Remember to enunciate your words. Vary the tone of your voice and the speed of your speech.

For the camera person. Keep the interview visually interesting. Before or after the interview, get some insert and cutaway shots of the environment, hands, buttons a person is wearing, etc. These can be edited in later.

Zoom in slowly and tastefully on important visuals which may provide emphasis.

➡ Get some people together and conduct some interviews with each other. Evaluate your technique.

7. PRODUCTION LOGISTICS



A little careful planning before you go out to shoot will be helpful. Try to visit the site where you will make your tape so that you know what to bring. If this is impossible, take enough equipment along to cover common emergency situations. Take a little more than you think is necessary. It won't hurt if you don't use a particular piece of equipment or that extra roll of tape. You'll be glad you had it with you, if you do need it.

Be sure to check out your equipment before you go. Is everything working correctly? Make a test recording before you leave and just before you tape the "real thing." Use a check list like the one provided in the appendix of this manual. Do you have--

- (1) the camera, camera case, lens cap, zoom lens and specialty lenses?
- (2) the VTR, two empty take-up reels, head cleaner? Are the heads clean?
- (3) an earphone? Microphone extension cables?
- (4) microphones and perhaps a mixer and mike stands?
- (5) a sufficient number of batteries, the AC adaptor? Are the batteries charged?
- (6) lights, extension cords, two- to three-prong adaptors, reflectors, cube tapes, fuses?
- (7) a tripod, monopod or body brace?
- (8) blank VIDEO TAPE? Make sure to label each roll as it is shot.

The location.

➡ **SOUND**--Check the acoustics. Are they live or dead? Will you need to bring some material, like blankets, to deaden the echo? If you're shooting outside, will you need a windscreen?

➡ **LIGHTING**--Is there enough light to make a tape? You might have to bring some lights with you. Where are

the electrical outlets? Where is the fuse box? How much current can you draw, i.e., 15, 20 or 30 amps? Will you need extension cords? Where are the windows in the room? You don't want to pan between relatively low light to bright light.

Be aware of contrasts. What will the people be wearing? Dark clothes will show up best in front of a light background. Make sure there isn't too much contrast, though. What will be the position of the sun or lights? Be cautious of the Vidicon. Don't shoot into the sun--EVER!

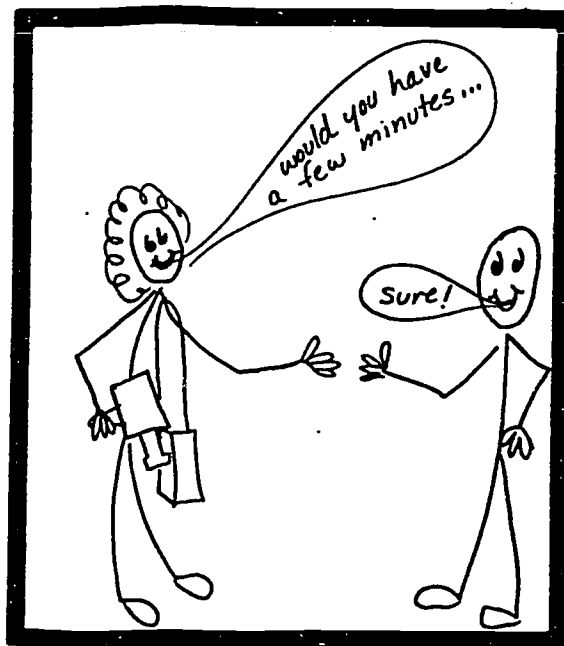
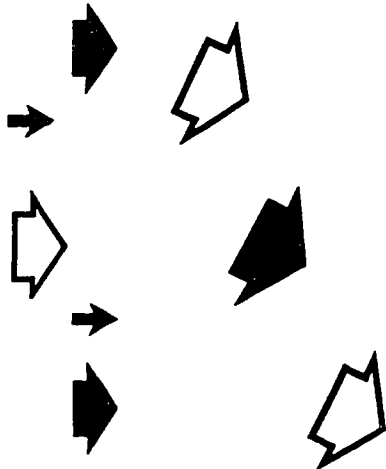
➔ PERMISSION--It's best to get permission to use a particular location. This permission may be refused at times, but if you still want to make a tape, use your head. Perhaps you will want to tape people as they come out of the location, i.e., a hospital waiting room, the welfare office, the police station. Challenging the rules is not unheard of. It is a good idea to ask the person you wish to tape if they will let you. You may need a legal release. Get this signed before you leave.

Production assignments. Give everybody involved in the production a job. Decide who will run the camera, do the interview, handle the microphones, check out the equipment, get the props, actors, etc. Don't forget to take a lunch break. Who's responsible for getting the food? Productions can get a bit hectic. Always try to take a person with you rather than go out alone. Porta-Paks are portable, but they get heavy after a while. Try to fix up a back-pack to reduce Video Fatigue.

➔ Identify all the pieces of equipment you will need for different types of productions. What will you need for a panel discussion? An on-the-street interview? A concert? Think up some assignments of your own and discuss the production logistics.

NOTES

8. VIDEO ETHICS

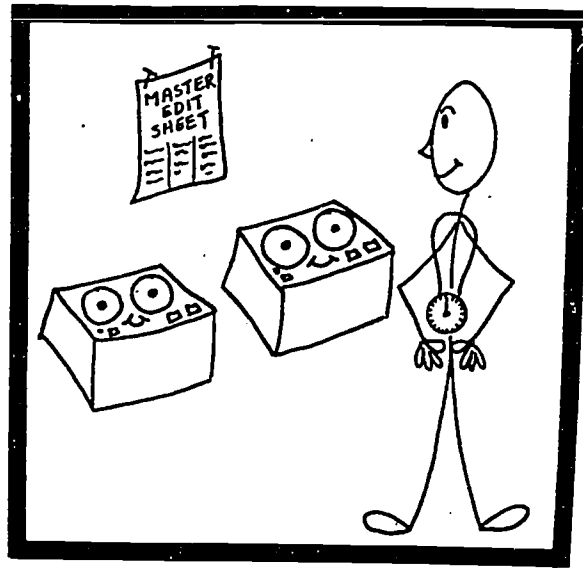


The goal of community television is not just the completion of any particular tape. It should, above all, facilitate the process of community interaction. Because of this, we feel that you have a responsibility to the members of your community when you go out to make a tape. Video can make people look foolish or noble. It can also show them just as they are. Don't hide behind the Porta-Pak. Use it to help people communicate with each other and to tell their stories. Video can be an effective tool for social change and personal growth--try not to abuse it. When you go out to make a tape:

- (1) try to be in a good frame of mind. No one likes a sourpuss. Realize that today might not be the day to make a tape.
- (2) identify yourself. Be friendly. Tell the subject why you want to tape them. What will the tape be used for?
- (3) get a release if the tape can't be defined as "news" or if you will show it commercially.
- (4) show people how to work the equipment.
- (5) play the tape back to them. Give them an opportunity to erase it and do it over again. Give them power over their own information and image. Don't rip them off.
- (6) involve them in the editing process or in producing another tape.
- (7) show the tape to their family or friends.
- (8) BREAK BREAD WITH THEM.

- Discuss the reality of Video Ethics.
- How does this approach differ from the approach of traditional media?
- Can you think of more ideas in this area?

9.EDITING



In this process, you manipulate sound and picture so that your completed tape says what you want it to say. A well-edited tape flows, is dynamic, makes smooth transitions (unless abruptness is part of the effect you wish to achieve) and gives the viewer the feeling that he or she is watching a complete statement rather than just segments of tape. In fact, it seems not to have been edited at all.

Video tape is not film. Though there are some similarities between them, there are also some very definite differences. Film can be physically cut and spliced together. By holding it up to the light, you can see what is on the film. You cannot do this with video tape. You must play it back through special equipment to see what is on it. You can only edit by electronically re-recording the selected parts. The information on video tape is elusive; it can instantly disappear by being passed over a strong electromagnetic field. Film has a very strong tradition. Video does not. The reality of video is still evolving.

Do not try to make video tape "instant film." It won't work. Begin to think about creating a flow of information rather than just pasting together a number of discrete shots. If you try to "cut up" your tape, you will defeat the purpose for using video, cause yourself a great amount of work and not fully utilize the potential of the medium. If your psyche demands physical manipulation of the medium, maybe you should try film.

Editing style. This comes from editing many productions. There are books available which can tell you which shots are most effective for what situations, how to cut on movement, matching action, etc. They are useful to study. But the only way you will really learn how to edit is by doing it. Through practice you will develop your own style and the ability to handle different kinds of subject matter. You will learn how to vary the pace, rhythm and tone of your productions. It will come--with time.

in camera editing

This is the simplest kind of editing. It is all done in the camera by turning on and off the RECORD function. Just pull the trigger. Some people can get quite good at this. It is not very time-consuming and you will be able to have a completed tape immediately after the event; however, there are some problems with this kind of editing. You must carefully think out how the tape will look. You must erase errors before going on, because you can't excerpt anything from the middle of the tape without disrupting the flow. Most Porta-Paks also make a horrible "click" and "glitch" on the screen when you pull the trigger. This can be reduced by fading in and out of the scene manually with the F-stop ring. This glitch will make some TV sets "roll," and the picture lose its stability. Because you are cutting your shots fairly tight there is no time for the Porta-Pak to "get up to speed" and develop a strong sync signal. Thus, post-production editing will be difficult if not impossible. The picture may look all right, but you won't be able to edit it. All in all, it is a good training aid, but not much good for serious production.

Try to make a short tape about your immediate environment using "in-camera" editing.

electronic editing

Electronic editing is the process by which you electronically transfer the sections you have selected from your original tape (master) to another tape in the order in which they will appear in the completed statement. You DO NOT physically splice video tape. It is possible, but you may cut your hands in the process, plus it looks ugly.

Shooting for editing. Though many people think they can "save it in the editing room," a little forethought will save later hair pulling.

Make sure that you have adequate visual material of your subject. Get some wide or establishing shots. Not too wide, though. TV is a close-up medium. Try to get shots of details, the reactions of listeners and different angles of the same scene. It is especially important to have these shots when editing an interview. Inserting them will give the viewer something more to look at than a half-hour of a talking head. Get these shots before or after the interview. If you have two cameras, one can be used to tape the straight interview, while the other is used as a "cutaway" camera.

Electronic editing requires that a strong sync signal be present on the control track of the video tape. Before, let your VTR roll about 10 seconds prior to the start of the interview. Otherwise, you will not be able to get a clean edit at the beginning of the interview. Let the VTR roll a bit long at the end, too.

Overlap your shots. Leave plenty of room on either end. Tape is cheap. Begin and end with a still camera shot. It is difficult to edit into or out of a moving zoom or pan. Be conservative with zooms or pans. Do them very slowly--even slower. Otherwise they will make you seasick. Make sure to hold a while on a close-up. If it is a sign, give the viewer time to read it. It is better to take close-ups with a wide angle at short distances than with a telephoto at long ones. This will reduce camera shake. However, sometimes you must use telephoto. Mount the camera on a tripod or brace it securely.

cataloguing your tape

If you have tightly scripted your production, this step will be very short. However, if you scribble out your shooting script on the back of an envelope on your way to the location--it may take some time, but it will help you organize your material and give you time to reflect upon your production. You will be a lot more cheerful when you go into the editing room. This is especially important if you are renting equipment or if it is heavily scheduled.

- (1) Make sure you label your tapes immediately after they are shot. Include the date, name of the production, subject matter and additional comments. If you anticipate shooting a number of tapes, give each one a number.
- (2) View your tapes, immediately after shooting. If you missed something you still might be able to go back and "pick up" the shots.
- (3) Begin to catalogue the tapes. Fill out the identifying information of the catalogue sheet (see next page). Zero the counter on the VTR when the first picture comes on the screen. Make brief but complete notes about each sequence. What kind of audio and video information is contained in each? Comments about the quality, length, etc., are also helpful. Do this for each reel of tape.

TAPE CATALOGING SHEET

Page 1
of 5

SUBJECT Community Art Fair PRODUCER Smith
REELS TAPED: 2 30-min reels 2 60-min reels REEL #1

COUNTER	TIME	VIDEO	AUDIO	COMMENT
000 056-187	2:00	Close-ups of art work Interview with H.Jones, artist	Background sounds Talks about his work (paint) Says it's hard to make it as an artist	
187-200 200-225 225-400	2:35	Medium shots of crowd Rock band	Crowd sounds Band sings 2 numbers-- Blue Suede Shoes and Searchin'	lens cap left on bad audio good musical num- bers
etc.	etc.	etc.	etc.	etc.

MASTER EDITING SHEET

PROJECT Community Art Fair PRODUCER Smith Page 1
of 3

REEL	COUNTER	TIME	VIDEO	AUDIO	COMMENTS
2	037-042	:32	Pan of art fair	Fade up "fair music"	
1	123-129	:20	Close-up of art work		
	132-137	:17	"		
	140-145	:18	"		
2	050-200	1:45	Interview	Fade out music Mr. Brown talks about being a sculptor	
		:30	TITLES	Fair music in again	
1	225-400		Rock band	Blue Suede Shoes & Searchin'	
etc.	etc.	2:35 etc.	etc.	etc.	

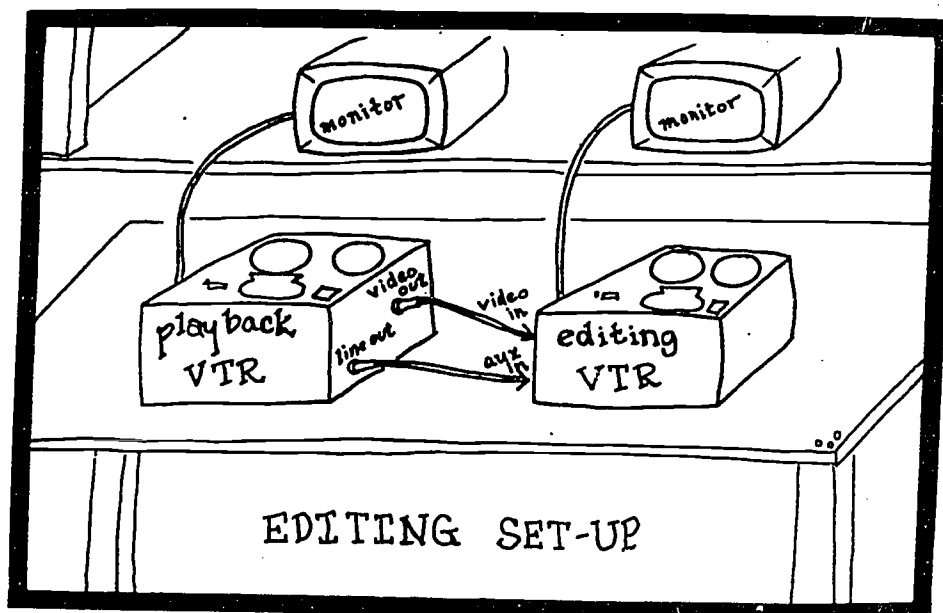
37

the rough cut

From your catalogue sheets, select the shots and sequences which you think you might be able to use in your final production. Transfer the information to 3 x 5 cards. You can then track them up, move them around and delete the ones you decide not to use. You might need to go out and shoot some more tape to fill in the gaps. When you are satisfied with the way your production looks, staple these cards in order on stiff pieces of paper or transfer the information to a master editing sheet (see previous page). You now have an efficient arrangement of your material so that when you go into the editing room, you will know what your production will look like. Sometimes things will not go together the way you have planned them. Be flexible.

making the edit

Electronic editing requires the use of two VTRs, two monitors and connecting cables. Do not use Porta-Paks for editing. They were not designed for it and don't do it very well. Two editing decks such as the Sony 3650 and the Panasonic 3130 will give you very good edits. If you have only one editing VTR, you'll still do all right. Use the non-editing VTR for playing back your original tape. Hook up the VTRs as described in the following diagram.



You will also need a stopwatch, paper and pencils, master editing sheet and video tape. Make sure that the tape you will edit onto is long enough to hold your entire production. Try to minimize disturbances while you are editing. Some of the best editing occurs at 3:00 AM.

- (1) Hook up the VTRs and monitors. Put the input selector on the editing VTR on LINE.
- (2) Turn on the machines and let them warm up.
- (3) If you are using new tape, run it through in FAST FORWARD and then in REVERSE. This polishes the video tape and knocks off any excess oxide particles.
- (4) Lay down a control track. Put some tape on the editing VTR, push RECORD and turn the lever to FORWARD. Make sure that it is not recording any audio or video information.
- (5) Clean the heads and the tape path. DO NOT SMOKE NEAR THE VTRs, as this will be detrimental to head and tape life.
- (6) Record some titles with the Porta-Pak. You can fade these in and out using the F-stop ring.
- (7) Clear the decks. Arrange your reels of tape, master editing sheet(s) and the rest of your supplies.
- (8) In electronic editing, both machines have to be rolling at the same speed. The edit points on both tapes must appear simultaneously. This means that the outgoing shot must end exactly when the incoming shot begins. There are a variety of methods for back-timing the VTRs so that this will occur. You will be using a combination of the counter and stopwatch methods. When you become somewhat proficient at this, you can experiment with other methods. Editing can be nerve racking. So take your time.
- (9) Put your first reel of tape on the playback VTR. Run it up to the beginning of your first shot. Push the button on the counter so it reads "000."
- (10) Run off about 30 seconds of tape on the editing VTR and zero the counter.
- (11) Rewind both tapes so that the counter on both machines reads "995" or so.
- (12) Get your stop watch ready. Put both machines in PAUSE. Do not leave them in PAUSE too long, as you will wear down your tape in one spot. Put both machines in FORWARD simultaneously. When one machine reaches "000," start your watch. When the other machine reaches "000," stop your watch. Record this number. You might want to check this again. By looking at the monitors, you will know whether your editing points are off. Correct this if necessary, by zeroing your counters at a different point.
- (13) DO THIS QUICKLY.
--Zero your counters.
--Run both machines back to "995," put the VTRs into PAUSE.
--Start the machine which took the longest to reach "000." Simultaneously start your watch. When the watch reaches the time you noted, start the second machine.

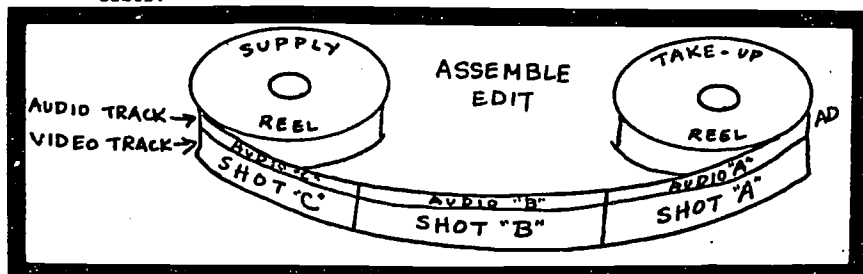
--Push down the EDIT button on the editing VTR. When both counters read "000," push the RECORD button quickly and firmly.

--You have just made an edit. You may notice that the audio drops out for a few seconds. This is normal. If your edit looks crumbly, i.e., not a clean "cut," retime and try again. Don't try to make an edit on top of one you previously made; it won't work.

different kinds of edits

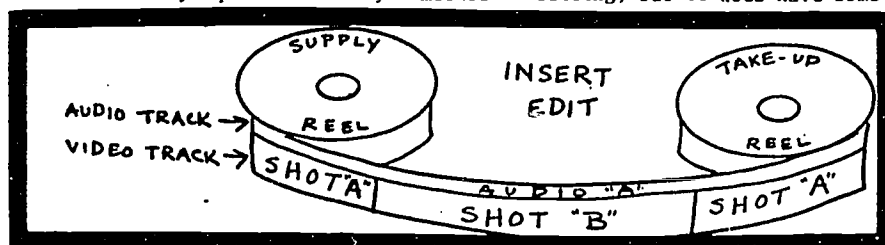
There are two kinds of edits: assemble and insert edits.

- (1) When you make an ASSEMBLE edit you are editing the head end of Shot B to the tail end of Shot A. Shot C is then edited to the end of Shot B, and so forth. The above instructions refer to making assemble edits.

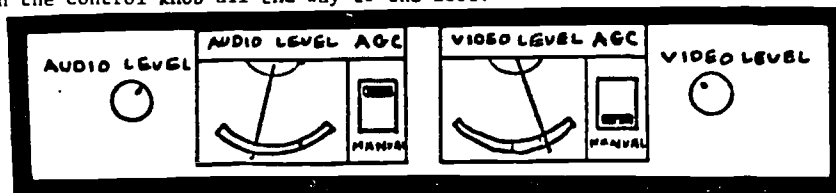


- (2) An INSERT edit allows you to insert video or audio material without disturbing some of the information on the tape. For example, if you have an interview tape and you wish to put in some cutaways or crowd reaction shots without disturbing the continuity of the speaker's statements, you would do an insert edit.

To do this, hold down the EDIT button when you push RECORD. When you get tired of the cutaway, turn the function lever to STOP--quickly. There is a good chance there will be no video break-up. This is a good way to insert graphics or still photos into an otherwise taped presentation. When you do this, be sure that your INPUT SELECTOR IS ON "CAMERA." You can do audio inserts by pushing down EDIT and then AUDIO DUB. There will be some discontinuity and when you put the function lever to STOP there may be some wow. It's a very "quick and dirty" method of editing, but it does have some applications.



- (3) Sometimes you may want to fade in or out rather than making a straight cut. You can do this with both video and audio. Set the video or audio level controls on MANUAL. To fade the audio or video down, turn the control knob all the way to the left.



To fade up, turn the knob to the right. Watch the needles on the meters and make sure they don't go into the red part of the scale. There is a relationship between the video level and sync. If your picture goes a little haywire, this is one of the prices you must pay. Only if you have a Special Effects Generator will you be able to do fancy fades, dissolves and superimpositions. Try to end your production with "grey" rather than the "snow" of unrecorded tape.

audio edits

When you make an assemble edit you transfer both audio and video from one tape to another. There may be some audio discontinuity.

You might want to lay down an audio track first and edit your video to it. To do this, push AUDIO DUB, put the function lever to FORWARD and start your audio source, i.e., tape recorder which is plugged into one of the VTR's audio inputs. To add video, follow the instructions for INSERT editing. The only difference is that you won't have to move the function lever quickly to STOP. You can let the video run long, because the editing is not critical.

If you want to put an audio track over pre-existing video, push down AUDIO DUB and put the function lever to FORWARD. You can fade the audio up and down by putting the Audio Level Control on MANUAL and turning the control knob. Be sure that the needle in the meter doesn't go into the red as it will distort the sound track.

- ▶ Hook up the VTRs for editing.
- ▶ Make some sample edits.
- ▶ Practice back-timing the VTRs.

10. PRODUCTION DESIGN

Now you will design and produce a short video statement. While you should try to use most of the things you have learned up to this point, do not plan on shooting an epic. Three to five minutes will be sufficient. Keep the theme simple and your production needs modest.




Re-read Designing Your Video Statement in Section 1. Answer the three basic questions.

- (1) What do I want to say?
- (2) To whom do I want to say it? What is my target audience?
- (3) How do I want to say it?

After you have decided upon a theme, story, skit, etc., and have identified your target audience, you can begin to create your production.

Pre-visualizing your production. It is often helpful to be able to "see" how your production will look before you go out video taping. Two methods used to do this are the storyboard and the script.

THE STORYBOARD--This technique was originally used by film instructors and animators. The entire production is broken up into shots and a picture of each shot, with identifying information and put on a 3 x 5 card. These cards can then be moved around, deleted or added to. This is similar to doing a rough cut. Also think about the audio you will need. When you are satisfied with the production you can transfer this information to storyboard script sheets (see below) or to a written script.

Storyboard-Script Sheet		
COMMUNITY Production Name <u>ART FAIR</u> Producer <u>SMITH</u> Date <u>6-20-79</u>		
Picture	Video	Audio
1. 	<u>Close ups of</u> <u>faces</u> <u>Try to get</u> <u>3 or 4 people</u>	<u>Crowd Sounds</u>
2. 	<u>Shots of</u> <u>MUSICIANS</u>	<u>MUSIC</u>
3. 	<u>Wide Shot</u> <u>of Crowd</u>	<u>MUSIC</u>

page 35

THE SCRIPT--The script can take a number of forms. In one version a picture of the shot you want is drawn on the left hand side of a sheet of paper. Immediately to its right is placed identifying information about the audio and video you will need. As you gain more experience and are able to visualize your shots better, you may feel confident about dropping the picture entirely. You can then write a script which contains only written information about the audio and video you want in your production. The easiest way to make up this kind of a script is to draw a line, the long way down a sheet of paper. Put some identifying information about the production at the top. Label one column "Audio" and the other "Video." In the sequence write down all the video information and the audio that goes with each picture. When you go out to shoot, remember to bring it along.

- ▷ Think up an idea you would like to tape.
- ▷ Begin to visualize the idea and make up a storyboard.
- ▷ Convert it into script form.

NOTES

11. SCRIPT REALIZATION-THE TAPING SESSION

You now have your completed script in hand and you are ready to pick up the Porta-Pak to go out to make some tape. Before you do this--

- (1) Re-read Section 2, The Porta-Pak. Pay particular attention to the parts which give you helpful hints about production, maintenance and trouble-shooting.
- (2) Check out all your equipment. Make sure it works. Clean the heads. Make a short sample recording. Play it back. Re-read Section 7, Production Logistics. Now you're ready to go.
- (3) During the taping session, make sure that everyone has a chance to run the camera, do the sound, carry the equipment, etc. This is a group effort. It will be a more profitable experience if every member of the group has a chance to experience the different parts of production.
- (4) If you have problems, DON'T PANIC. Most equipment hassels are easily solved. RELAX. Sit down and think about what may be wrong. Consult this manual and any other information you might have with you. If you can't figure it out, see what your instructor has to say. Video equipment does break down, but usually it is a question of the operator having forgotten one simple step. Once the problem is corrected, you are on your way again.
- (5) When you have finished taping, view your production. Compare it to the script. Did you forget anything? If so, "pick up those shots" NOW, or schedule a time to get them before the editing session.
- (6) Make sure that you label your tapes.

N O T E S

12. SCRIPT REALIZATION-THE EDITING SESSION

You will now put together the production you have worked so hard to create.

- (1) Re-read Section 9, Editing.
- (2) Make up some simple graphics to identify your production. Magic Marker on light grey cardboard or paper works fine. If you want to get fancy, try Press-On letters. Keep your titles simple. Don't crowd the letters. Give yourself plenty of room around the letters, so that you won't have trouble composing them with the camera. Shoot some tape of the graphics--get some tape of a sign or other identifying information at your location. Be creative.
- (3) Take your tape, master editing sheet, etc., into the editing room. Leave your cigarettes behind.
- (4) Give yourself plenty of room to work.
- (5) Everybody should have a chance to make some edits. This will take some time--so relax.
- (6) Don't hassle the person who is making the edits. Editing gets tricky sometimes and you need your power of concentration to do them well.

N O T E S

13. EVALUATION

This is the moment of truth where you show your production to others and discuss it critically.

- (1) Invite your friends to see the production.
- (2) Screen the production.
- (3) Ask for general comments. "I liked it--I didn't like it." Why did people like it or not like it?

Not everybody will like your production. Try not to get defensive if they don't. This was your first try and it is basically a learning experience. No one is grading you.

- (4) Have the people who worked on the production criticize it. Did it say what you wanted it to say? Did it reach the people you intended it to reach? How was the camera work? The editing? Was the music appropriate? Did it work? Think back. What kind of problems did you have during the production? How would you rectify them? Was it a problem with the idea? The script? The equipment? Talk openly about the problems. Write them down so that you'll remember for next time. If you're completely satisfied--start worrying--you can all improve.

NOTES

14.A FINAL WORD ON COMMUNITY TV PRODUCTIONS

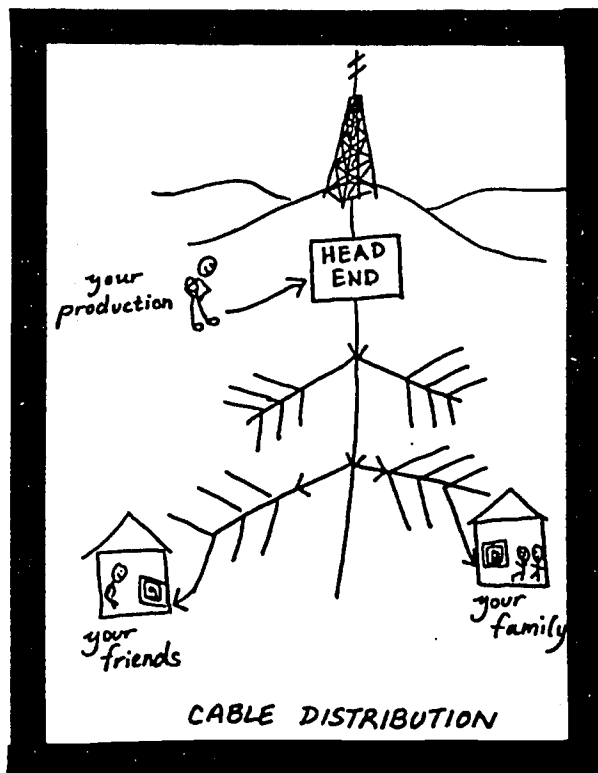
Community television productions do not have to have large budgets, a lot of equipment, fancy set, etc. They were never intended to compete with the slick productions you see on broadcast TV. But this does not mean that they have to be droll, boring, slow, uninteresting and badly-shot or edited. Because your equipment is lightweight, portable and easy to use, you can make video tapes just about anywhere. There are no commercial considerations to hold you back, so you can make a tape about anything you want. And because you don't need a mass audience, your tape can be shown in a wide variety of places.

NOTES

15. DISTRIBUTION

You may want to show your production to a wider audience than just your production group and friends. Try showing it on the street, in a laundromat, a church, etc. You are only limited by your own imagination.

If you have a local cable TV station, talk to the system manager about putting your production on the cable's local origination channel. If your cable system has a Public Access Channel, find out about it. The cable owner may even help you get some equipment, tape, etc., to do more productions. At least, he should let you have some time to cable-cast your production and others made by community members. If he doesn't want to give it to you, talk to your City Council representative about the franchise he has to operate the cable TV system. It is in your town at the largess of the community. Cable TV makes money from your community and it should be willing or coaxed to provide the community with more than just re-broadcast commercial programs. Do your homework about cable. Persevere, if you don't get what you want immediately. Remember, it is in the cable system's best interest to help you. The more people that use the cable, the more it will become part of a community communications network. Because more people in the community will want to watch local programming, it will benefit by increased subscriber revenue.



Some of you more ambitious ones will try to get your production on broadcast TV. This is a bit more difficult than getting on the cable, but it can be done. Broadcast TV time is very expensive, but they may be willing to put your production in a Community Affairs time slot. Commercial TV stations are required by the F.C.C. to provide community affairs programming. You might have grounds to block their license renewal if they balk at filling this requirement. Remember: the airwaves belong to the people. TV stations do not own the airwaves. They are permitted to occupy them for a specified period of time. The TV station may give you lip service about being interested in putting on community-oriented productions. However, they may say that your video tape equipment won't provide them with a signal which will

meet F.C.C. standards. This is true--sort of. There is a way around the problem. If the station owns a Time-Base Corrector, they can run your helical scan through the TBC and then dub it up to two-inch tape. They can then show the production without any problems. Another way to broadcast helical scan tapes is to play the tape back through an underscanned, high-resolution studio monitor. You then take a studio camera and point it at the face of the monitor. The program then can be video taped or broadcast live. You might lose some resolution, but if you had enough light when you shot the tape, it should be passable. And it will meet F.C.C. standards.

Good luck on distributing your productions. Let us know what your experiences are.

NOTES

16. SKILL SHARING

This section is designed to help those of you who wish to share the skills you have acquired with people in your communities.

Be confident and competent in your own video production ability. Get a couple of productions under your belt before you try to teach anyone else. Perhaps you might want to sit in as a trainee in a video production workshop. You can always learn more. So don't rush it.

When you have decided that you want to run a workshop yourself, REMEMBER--

- (1) Your primary goal is to communicate information so that when a person completes the experience, he or she will understand the production process and be able to carry through a production from start to finish without your help.
- (2) Your goal is NOT to impress your students with your vast knowledge of video. Nor is it to confuse them with a lot of jargon. If you need this ego gratification, then maybe community TV is not for you. Above all, strive to de-mystify the medium. Put the equipment in the people's hands. Help them dispel their fears by their own actions. A good production instructor might never handle the equipment while sharing the skills with others. Use plenty of examples of the use of video in the community. Refer to these rather than to commercial TV.

Get the group to cooperate with each other, if you can. Show them once and then let them do it alone.

Evaluation: Don't be too quick to criticize. It is better to point out alternatives than to condemn something out of hand. People don't like to be put down. Be supportive of their needs. The development of their creative abilities is more important than the demonstration of your production skill. If you have the skill it will be obvious.

It is important for a successful production experience that the group (including the instructor) have a good feeling for the needs and expectations of its members. The variety of skills and experiences contained within the group will give the instructor clues as to what material should be lightly touched on and which should be dealt with in depth. Later on, this information may become useful in putting together the production.

The first session is one of the most important blocks for the experience. It is where the group will begin to form. This is one of the primary elements of community TV--the cooperative experience. Who knows what

future production endeavors may grow out of this initial meeting?

- (1) Hold your meetings in a comfortable environment. If you get a warm, cozy feeling when you walk into the room, it is probably okay. Try to keep intrusions to a minimum. Turn off the radio. Have someone else answer the phone.
- (2) A pot of coffee or some other beverage will help ease things. Cookies are usually enjoyed by all. Be cognizant of how the group feels about smoking.
- (3) Sit in a circle. The make-up of the group will determine whether you sit on the floor or on chairs. Learn everybody's name. Find out why they are there. What do they know about video? What do they hope to learn? Think of the experience more in terms of a living room discussion than a classroom situation.
- (4) The production experience may become a bit tedious at times. Here the togetherness of the group will tell. Make sure that they know what the group task is, i.e., the completion of a short video statement. Be aware of their various needs and learning speeds.
- (5) Take time to listen. Asking questions to facilitate discussion between group members will often lead to the "discovery" of that most important principle you were just going to tell them about. It is better to open the door than to try to push someone through it.
- (6) Do not let the discussion become too tangential. Keep the focus. You have a limited amount of time, much information to share and little time to do it in. Don't let one or two people monopolize the conversation. Everyone should participate; make sure the entire group understands what you are talking about before going on to the next topic.
- (7) Do not be too quick to break up the session after the allotted time. Discussions over coffee or beer often are revealing.
- (8) Be patient.

At the end of the experience, if you are courageous enough, have the group criticize the content of the course and your ability to communicate the information contained in it.

Listen to them--their feedback is vital to your continued success as an instructor.

Remember the three cardinal rules:

- (1) DE-MYSTIFY THE INFORMATION
- (2) GIVE PLENTY OF HANDS-ON EXPERIENCE
- (3) ENCOURAGE COOPERATION



page 44

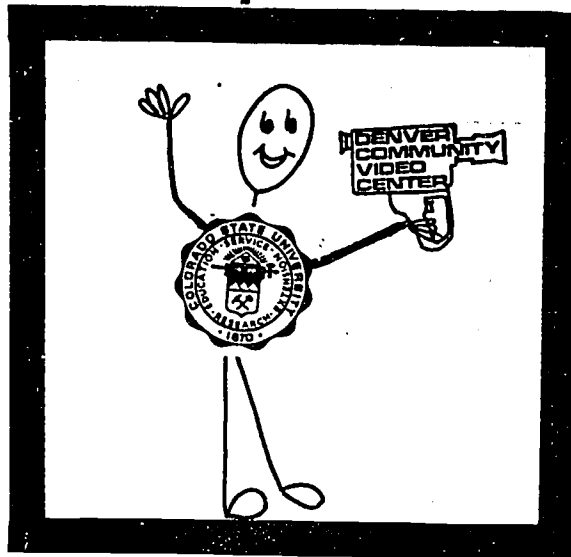
We would like some feedback on this manual. Please let us know how you feel about it.

Thank you and GOOD LUCK.

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Layout and Copy Preparation by Thomas A. Kramer and Jeannine Gambrell, Colorado State University.

Printed by Printing and Publications, Colorado State University.

Funded by Title I, Higher Education Act, 1965, in cooperation with Colorado State University Extension Service.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. Lowell H. Watts, Director of Extension Service, Colorado State University.

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appendix A.

VIDEO GLOSSARY

AC--Alternating Current. The electrical current used in your home is 117 volts alternating current, commonly referred to as "AC."

AGC--Automatic Gain Control. AGC automatically raises or lowers the audio or visual level to keep it constant. In audio a soft sound is recorded at the same level as a loud one. AGC reacts strangely to ABRUPT changes in sound level.

ALTERNATING CURRENT--See AC.

AMPLIFIER--An electronic device which is used to enlarge or boost a signal, audio, visual or radio wave.

APERTURE--The opening of the iris of a lens. The iris controls the amount of light that enters the camera, measured in F-stops.

ASPECT RATIO--A numerical ratio relating height to width. The normal TV aspect ratio is 3:4, three units high by four units wide. Any photographs, titles, etc., should adhere to this ratio, with two additional units of empty space on each side of the copy.

AUDIO--The sound portion of the video tape recording.

AUXILIARY INPUT--AUX IN. The auxiliary input on audio and video equipment refers to an input that will accept signals from record players, tape recorders, radios, television sets or any other source that has an amplified output.

BROADCAST TV--The dissemination of television programming by means of radio frequency (RF) transmission. Used in reference to professional over-the-air television stations.

CABLE TELEVISION--A system over which television programming is distributed to the community via a coaxial cable.

CATV--Community Antenna Television. A subscriber-financed service which allows the home TV set to receive distant or blocked TV signals. A system of coaxial cables are connected to a large, highly-elevated TV antenna at one end and the subscriber's TV set at the other. A form of cable TV.

CCTV--Closed Circuit Television. TV programs that are distributed via a coaxial cable in a small internal system such as in a college or business.

COAXIAL CABLE--Special electrical wire which permits transmission of video and audio signals with low loss and is shielded from outside interference.

COMPATIBILITY--Often confused with interchangeability. Compatibility to us is the ability of one video or audio component to be electronically connected to another.

CONNECTOR--A plug or jack used to connect two pieces of equipment or cords together.

CONTRAST--The ratio of the dark to light portions of a television picture. Pictures having high contrast have very deep blacks and brilliant whites, while a picture with low contrast has an over-all grey appearance.

CREDITS--Cast list and job titles of all persons connected with a particular program. Usually, but not necessarily appearing at the end of the program.

CUE--A signal to start.

CUT--An abrupt change in scenes when one image is instantly replaced by another.

DEPTH OF FIELD--The area in front of the lens in which everything appears in sharp focus.

DISSOLVE--The superimposition of the fade-out of one scene and the fade-in of another. Accomplished by using a special effects generator (SEG). It provides more continuity than a straight cut, since you see one scene disappearing as the other appears. Often called a "cross-fade" or "lap dissolve." Also applies to audio.

DISTORTION--Observable differences in picture and/or sound from the actual scene you are taping. These may be electronic, mechanical or optical in nature, or any combination of the three. Distortion may be used intentionally as a special effect.

DUBBING--Duplicating video or audio tape; also inserting new audio on a video tape.

DROPOUT--Horizontal white lines or spots which appear during the playback of a video tape. Caused either by the lack of magnetic coating on the tape or poor head to tape contact.

EIA--Electronics Industries Association. Active in establishing standards for performance in the broadcasting industry.

EIAJ--Electronics Industries Association of Japan. Active in establishing standardization of $\frac{1}{2}$ " video tape recording equipment.

EDITING--An electronic process by which video sequences are placed in sequence to form a coherent program.

F-STOPS--Click stops on the lens, marking the position of the iris. Large F-stop means a smaller opening, less light and a small F-stop number means a larger opening and more light.

FADE--A gradual transition from a blank screen to a full strength picture (fade-in or fade-up) or vice versa (fade-out or fade-down). Used to imply passage of time or change of scene.

FCC--Federal Communications Commission. The federal agency responsible for making policy and exercising control over most communications media such as radio, broadcast television, cable TV, telephone, etc.

FEEDBACK, AUDIO--A squeal or howl caused by a microphone being placed too close to the output(speaker) of the piece of equipment it is connected to.

FEEDBACK, VIDEO--The process where the camera is focused on the image shown on a monitor that it is connected to. This causes a looping of the signal from camera to monitor and back to the camera and so on. Used for unusual and creative effects.

FIELD/FRAME--In reproducing a television picture on the face of a TV set, the electron gun scans the face of the tube horizontally from left to right and top to bottom. The American standard is 525 lines or scans in a picture. The beam scans first the odd-numbered lines then comes back and scans the even-numbered lines. Each complete scan from top to bottom takes 1/60th of a second and is known as a field. Two fields (even and odd) form a complete picture and are called a frame. The ability of our eyes to retain an image makes this procession of still pictures appear to move. The image you see when a VTR is in the stop motion or PAUSE mode is only one field or half the picture. You will therefore notice a loss of detail.

FILMCHAIN--A set-up consisting of one or more projectors projecting directly into the lens of a television camera to allow film or slides to be directly transferred to video tape.

FOOTCANDLE--A unit of measurement referring to the quantity of light falling on an object. Thirty footcandles of light are required for most portable video cameras. Footcandles can be measured with most standard photographic light meters.

GAIN--Amplification of signal strength. The more gain, the stronger the signal becomes. The audio gain control is often called the volume control.

GENERATION--A term denoting how far a particular tape is removed from the original. The original (master) is the first generation and its copy is the second generation and so on. The quality deteriorates with each generation, so copies should be made from the master.

GLITCH--Refers to almost any brief distortion of the picture during playback.

GRAPHICS--Still visual material (photos, titles, diagrams, etc.) made for a TV program.

GREY SCALE--A ten-tone range of black to white as resolved by the television camera. Useful in testing a camera for proper operation.

HEAD (VIDEO)--A pair of rotating electromagnetic devices which record signals on video tape and playback signals from the tape.

HEAD (AUDIO)--One or more fixed electromagnetic devices which can both record on and playback from an audio or video tape.

HEAD (ERASE)--A fixed electromagnetic device which can erase signals on a magnetic tape.

HELICAL SCAN--The $\frac{1}{2}$ " video tape recording method in which each field is recorded separately in slanting (helical) tracks by video heads scanning past the tape. Also called Slant Track Recording.

IMPEDANCE--An electronic characteristic of microphones. Generally they are either high or low impedance. Low impedance mikes can be used with long extension cords and will not lose their signal unlike high impedance mikes. Microphones are generally marked somewhere as to their impedance. They are compatible with the aid of an impedance matching transformer.

INTERCHANGEABILITY--Often confused with compatibility. Refers only to the VTR's ability to record tapes which can be played back faithfully on other VTRs.

INTERFERENCE--Bursts or flashes of extraneous electrical energy which may interfere with the sound, picture or synchronization.

IN THE CAN--A term borrowed from film to refer to a production which has been completed.

IRIS--The adjustable sized hole that controls the amount of light entering the camera through the lens. Calibrated in F-stops.

JACK--A socket or female connector that mates with a plug.

JACK PANEL--(patch panel) A panel containing a row of jacks for interconnecting audio or video inputs or outputs.

JITTER--When a picture has poor vertical sync and jumps up and down.

KINESCOPE--Often called "Kine." A sound motion picture photographed directly off of the face of a high resolution video monitor.

LAVALIERE--A small microphone worn around the neck.

LEVEL--A general measure of the strength of an audio or video signal. The level is adjusted to bring the audio or video to a desired strength.

LIP SYNC--When the movement of a person's lips and his words coincide.

LONG SHOT--A scene which takes in a wide angle of view. Also called a Wide Angle Shot, or establishing shot. Abbreviated as LS or WS.

MASTER--The original tape or the final edited version that will be used to make duplicate copies.

MIXER--A device for combining two or more audio signals.

MEDIUM SHOT--A shot midway between a long and close-up shot. Abbreviated MS.

MODE--The way in which a machine is operating or is ready to operate, i.e., when ready to record, the VTR is in the RECORD mode.

MONITOR (AUDIO)--An amplifier which allows you to hear the sound recorded on a tape or picked up by microphones.

MONITOR (VIDEO)--Similar to a regular television set, but lacking the ability to pick up broadcast TV signals. It has video and sometimes audio inputs for connection to a VTR or camera.

NOISE--In a television picture, the effect of a pattern over the desired picture caused by outside interference. Also called snow.

OMNI-DIRECTIONAL MICROPHONE--A microphone that picks up sound in a spherical pattern.

OUTPUT--The terminal point (plug or jack) of an electronic unit from which the signal is taken.

OXIDE--Magnetic particles which are coated onto video tape.

PAN--Moving the camera horizontally around a fixed point.

PATCH PANEL--See JACK PANEL.

PICTURE TUBE--The screen on your TV set is known as the Cathode Ray Tube. It is the sister of the Vidicon tube.

PLUG--An electrical male connector that fits into a jack.

POT--Potentiometer. A control knob which varies the strength of the signal. The volume control is a pot.

PUBLIC ACCESS--The process by which people in the community have free and open access to one-cable television channel, set aside for Public Access by the F.C.C.

RECEIVER--A standard television set. A unit designed to pickup standard broadcast television signals.

RECEIVER/MONITOR--A special TV set that receives regular broadcast signals and has video/audio inputs/outputs. It allows you to record TV broadcasts off the air.

RESOLUTION--Visible detail. The resolution of a TV is less than a good photograph. Porta-Paks resolve about 300 lines. Resolution is measured in lines; the more lines the sharper the picture and thus the better the resolution.

RF--Radio Frequency. Any signal sent over the airwaves like TV and radio.

RF CONVERTER--A device that allows a VTR to playback on a standard TV by converting the video and audio to an unused channel that can be received by the TV.

SKEW--The bending or flagging to the left or right of the top of the TV picture. Skew error on the video tape is corrected by adjusting the skew control on the VTR.

SLANT TRACK--See HELICAL SCAN.

SNOW--The salt and pepper pattern of a TV caused by a lack of signal.

SOLID STATE--An electronic device that uses transistors.

SPECIAL EFFECTS GENERATOR--(SEG) A device that allows you to switch between two or more cameras and mix, wipe and do other fancy things to the final recorded picture.

SPLICE--Physical joining of two pieces of tape. NEVER DO THIS WITH VIDEO TAPE!! It will cause damage to the expensive video heads.

STABILITY--How much the picture moves vertically or horizontally. A rock solid picture that doesn't move is stable.

STORYBOARD--Drawings of picture and sound in comic strip fashion. An organizational device used to previsualize a production.

SUPERIMPOSE--(Super) The simultaneous showing of two pictures on one screen.

SYNC--(Synchronization) The pulses that keep all television equipment scanning in time with one another. Similar in purpose to sprocket holes in film.

SUPPLY REEL--The reel which contains the tape to be recorded or played back.

SWITCHER--A device which allows you to select one or more camera pictures for output to the VTR.

SWITCHER/FADER--Same as above but allows fading between two cameras.

TAKE-UP REEL--The reel that stores the tape from the supply reel.

TEARING--Horizontal picture distortion.

TEST PATERN--A drawing of lines and circles used to adjust a video camera. TV stations show them first thing in the morning on broadcast TV.

TILT--Vertical camera movement about a fixed point.

UNI-DIRECTIONAL MICROPHONE--A microphone that picks up sound in one direction. Called a directional mike. It usually has a cardioid (heart-shaped) pick-up pattern.

VIDEO--The picture portion of a video tape recording or TV broadcast. Also used to refer to Guerrilla or alternative television.

VIDEOCASSETTE--Video tape packaged in plastic cases instead of reels. Usually 3/4" wide.

VIDEO TAPE--Plastic-based tape coated with oxides capable of being magnetized in a uniform manner and of holding those patterns which are the picture and sound.

VIDICON--The television pickup tube in a video camera that picks up the image from the lens and makes it into signals for the VTR.

VOICE OVER--Narration accompanying a picture which is not synchronized with the lip movements on any person appearing on the tape. Usually recorded after the original recording.

VTR--Video tape recorder.

VU METER--(Volume Unit Meter) Measures the strength of an audio signal in volume units. Over zero VU meter, the sound is distorted.

WIDE ANGLE LENS--A lens with a wide angle of view. It can see wide areas from close up. Usually in the 8mm to 13mm range.

ZOOM LENS--A lens that has a variable focal length. It can be adjusted (zoomed) from a wide angle of view to a telephoto (close-up) view. A 75mm to 12.5mm zoom lens is most common with 1/2" video cameras.

ZOOM--The action of adjusting the focal length and thus the angle of view of the zoom.

appendix B.

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appendix C.

PORTABLE VIDEO TAPING SYSTEM--EQUIPMENT CHECK LIST

Before leaving, check to see if you have all the equipment you need. Be sure that you return all the equipment, cords and plugs. If you have any problems call the office. Report any equipment failures.

ESSENTIAL EQUIPMENT	OPTIONAL EQUIPMENT		
POWER SYSTEM			
<input type="checkbox"/> internal battery (30-min. check meter)	<input type="checkbox"/> extension cords		
<input type="checkbox"/> OR			
<input type="checkbox"/> external battery (three hours)			
<input type="checkbox"/> OR			
<input type="checkbox"/> AC adaptor (wall current)			
<input type="checkbox"/> three-prong adaptor plug			
NOTE: Shut all switches OFF before plugging in. Recharge after use.			
RECORDER SYSTEM			
<input type="checkbox"/> recording deck			
<input type="checkbox"/> take-up reel			
<input type="checkbox"/> cleaning kit (Q-tips and alcohol)			
<input type="checkbox"/> video tape How many half-hours? _____			
NOTE: Check camera/TV switch, check tracking switch, thread only if power is off, check to see if heads are clean and recording by test recording, before starting.			
CAMERA SYSTEM			
<input type="checkbox"/> camera	<input type="checkbox"/> shoulder brace		
<input type="checkbox"/> lens cap	<input type="checkbox"/> tripod		
<input type="checkbox"/> zoom lens	<input type="checkbox"/> 32' extension cord		
NOTE: Take off lens cap when power is on, do not carry pointing down, do not point camera at bright lights or the sun, check F-stop.			
SOUND SYSTEM			
<input type="checkbox"/> earplug	<input type="checkbox"/> mike stand		
<input type="checkbox"/> microphone (external)	<input type="checkbox"/> extension cords		
<input type="checkbox"/> connecting cord	<input type="checkbox"/> mike mixer		
	<input type="checkbox"/> additional mikes		
	<input type="checkbox"/> shotgun mike		
NOTE: Use earplug to check sound level, place the mike as close as possible to speaker, handle mike care- fully to avoid background noises, avoid camera talk if camera mike is live.			
LIGHT SYSTEM			
	<input type="checkbox"/> light kit		
	<input type="checkbox"/> extension cords		
PLAYBACK SYSTEM			
	<input type="checkbox"/> monitor		
	<input type="checkbox"/> 10- to 8-pin cord		
	<input type="checkbox"/> power cord or RF adaptor		
NAME _____	DATE _____	IN _____	OUT _____
ORGANIZATION _____	SIGNATURE _____		

appendix D.

ACCESSORY EQUIPMENT LIST

You may find it useful to purchase the following items for dealing with routine production situations and simple maintenance of the Porta-Pak.

1. AC power extension cords of various lengths.
2. AC-multiple outlet box(es)
3. Cube taps, for three-way connection of power cords
4. Two- to three-prong adaptors for power cords
5. Gaffing or duct tape
6. Clip-on lights with 300-watt bulbs
7. AC fuses of different amperages
8. Tool box
9. 25 to 50-watt soldering iron
10. Resin core solder--like Kester "44"-".032"
11. Needle-nose pliers--get an assortment with insulated handles
12. Electrician's pliers
13. Slotted screwdrivers--an assortment
14. Phillips screwdrivers--an assortment
15. Jeweler's screwdrivers
16. Hook-up wire--zip cord or facsimile
17. Fuse for the video equipment
18. Audio-video spray head cleaner
19. Plastic electrical tape
20. Electrician's pocket knife
21. Video splicing tape
22. Volt-ohm or multi-meter
23. Diagonal cutters
24. Clip leads--wire with alligator clips on the ends
25. An assortment of connecting cords for the audio and video equipment
26. Assortment of audio-video adaptors
27. RG59U coaxial cable and shielded audio cable

appendix E.

STORYBOARD-SCRIPT SHEET

PRODUCTION NAME _____ DATE _____

appendix F.

TAPE CATALOGING SHEET

page _____
of _____

SUBJECT _____ PRODUCER _____

REELS TAPED: 30-min. reels 60-min. reels REEL

COUNTER	TIME	VIDEO	AUDIO	COMMENTS

page 57

page 57

appendix G.

MASTER EDITING SHEET

page _____
of _____

PROJECT _____ PRODUCER _____

REEL	COUNTER	TIME	VIDEO	AUDIO	COMMENTS

page 58

page 58